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Bennett's Latin Series

The Latin Language

A HISTORICAL OUTLINE

OF ITS

SOUNDS, INFLECTIONS, AND SYNTAX

BY

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PREFACE.


THIS book is a revision of my *Appendix to Bennett's Latin Grammar*, published in 1895. That book was originally prepared as a series of lectures to advanced students on subjects not covered in any Latin Grammar published in America. The title "Appendix," however, was misleading and gave to many a wrong impression of the purpose and scope of the book, which was in reality written long in advance of the publication of my *Latin Grammar* and entirely without reference to that work. The new title is more appropriate to the views discussed and the facts brought out; hence the change.

In the revision some dozen pages of old matter have been omitted, while nearly forty pages of new matter have been introduced; but the general plan and scope of the book are unchanged.

I am indebted to Professor J. C. Rolfe, of the University of Pennsylvania, and to Professor Charles L. Durham, of Cornell University, for valuable suggestions made while the book was passing through the press.

C. E. B.

ITHACA, March, 1907.



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LIST OF ABBREVIATIONS AND SIGNS.



Archiv = Wölfflin's *Archiv für Lateinische Lexikographie und Grammatik*.
Vols. I.-XV. Leipzig, 1884-1907.

CIA. = *Corpus Inscriptionum Atticarum*. Berlin, 1873 ff.

CIG. = *Corpus Inscriptionum Graecarum*. Berlin, 1828 ff.

CIL. = *Corpus Inscriptionum Latinarum*. Berlin, 1863 ff.

E. L. D. = Lewis, *Elementary Latin Dictionary*. New York, 1895.

Gr. or *Grammar* = the author's *Latin Grammar*. Boston, 1895.

Gröber's *Grundriss* = Gröber's *Grundriss der Romanischen Philologie*.
Strassburg, 1888 ff.

Keil = *Grammatici Latini*, ed. Keil. Leipzig, 1855 ff.

Körting, *Wörterbuch* = Körting, *Lateinisch-Romanisches Wörterbuch*.
2d edition. Paderborn, 1901.

Marx = Marx, *Hülfsbüchlein für die Aussprache der Vokale in positionslangen Silben*. 3d edition. Berlin, 1901.

References by § are to the *Latin Language* itself.

Words marked with a star are hypothetical forms.

Vowels printed without the macron (e.g. *a*, *e*) are short ; for greater precision these are sometimes printed with a breve (e.g. *ă*, *ĕ*).

CHAPTER I.

THE ALPHABET.

1. 1. The Latin alphabet is a development of that type of the Greek alphabet known as the Chalcidian. In the widest sense the term 'Chalcidian' is applied to all the non-Ionic Greek alphabets; in a narrower sense it designates the special alphabet of the Chalcidian colonies of lower Italy and Sicily. These colonies, settled originally from Chalcis in Euboea, date from very early times. Cumae, in fact, is said to have been founded as far back as 1050 B.C. But most of the Chalcidian settlements do not antedate the eighth century B.C. It was probably from the Campanian colonies of Cumae and Neapolis that sometime in the sixth century B.C. the Chalcidian alphabet was introduced into Latium. Special peculiarities of this alphabet are the following:

2. The character Ξ was lacking, χ was used as x , and Ψ (ψ) as ch . *Lambda*, which in Ionic had the form Λ , took in Chalcidian the form λ , while *Gamma* (Attic Γ) was C . Besides K , another character for the k -sound existed, *viz.* φ , called *Koppa*. For *Rho*, R was employed as well as P , the ordinary Attic form of that letter.

In conformity with its Chalcidian origin the earliest Latin alphabet consisted of the following twenty-one characters: A B C (=g) D E F I (Z) H I K λ M N O Γ φ R Σ T V X.

3. Of these characters, λ subsequently became L. C in course of time came to be used for K, which then disappeared except in a few words: *Kalendae*, *Kaesō*, *Karthāgō*. For the g-sound a new character, G, was invented, by appending a tag to the older C. But permanent traces of the original value of C as g,

remained in the abbreviations *C.* for *Gāius* and *Cn.* for *Gnaeus*. The new character G took the place hitherto occupied by I, which now disappeared. These changes are ascribed, with some degree of probability, to Appius Claudius, Censor 312 B.C. Γ was at first open as in Greek, but subsequently became P.

The Greek alphabet had no character to represent the sound of *f*, but the Greek Digamma (F) represented a closely related sound, *v*. This F, combined with H (apparently to indicate the voiceless character of the sound, as opposed to that of the Greek Digamma), was introduced into the early Italian alphabets to designate the sound of *f*. An example is FHEFHAKED (= *fefaced*, i.e. *fecit*), in the earliest extant Latin inscription, CIL. xiv. 4123. Later, the H was discarded and F used alone.

4. The Greek letters Θ (θ), Φ (φ), and Ψ Ψ (χ), being aspirates, represented sounds which did not originally exist in the Latin language. These characters were accordingly introduced as numerals, Θ as 100, Φ as 1000, Ψ as 50. Subsequently Θ became Ċ, and finally C. This last form resulted perhaps from associating the character with the initial letter of *centum*. Φ became first M̄, and later M, a change facilitated probably by association with the initial letter of *mille*.

The half of Φ viz. D, was used to designate 500. Ψ (50) became successively ↓, ⊥, and L.

5. In Cicero's day Y and Z were introduced for the transliteration of Greek words containing *υ* or *ζ*. Previously Greek *υ* had been transliterated by *u*, and *ζ* by *s* (initial), *ss* (medial), as, *Olumpio*, *sona* (ζώνη), *atticisso* (ἀττικίζω).

The Emperor Claudius proposed the introduction of three new characters, J to represent *v* (i.e. our *w*), O (*Antisigma*) for *ps*, and T to represent the middle sound between *ŭ* and *ĩ*, as seen in *optumus*, *optimus*, etc. These characters were employed in some inscriptions of Claudius's reign, but gained no further recognition. See Tacitus, *Ann.* xi. 14.

On the alphabet in general, see KIRCHHOFF, *Studien zur Geschichte des Griechischen Alphabets*. 4th ed., Berlin, 1887.

LINDSAY, *Latin Language*. Clarendon Press. Oxford, 1894. p. 1 ff.

Encyclopaedia Britannica, Article *Alphabet*.

JOHNSON'S *Encyclopaedia*, Article *Alphabet*.

SOMMER, *Handbuch der Lateinischen Laut- und Formenlehre*. p. 25 ff.

2. In writing *j* in the *Grammar* to represent the Latin *i-cōnsonāns*, reference has been had mainly to practical considerations. Typographical distinction of the vowel and consonant sounds of *i* is absolutely essential to enable the pupil to tell them apart. Where *i* is written for both sounds there is nothing to show the student that *iam* is *jam*; that *etiam* is *et-i-am*; or that *Gāius* is *Gā-i-us*. Moreover, it is still usual to distinguish between the vowel and consonant *u*, by writing *u* for the former, and *v* for the latter. The two cases are perfectly parallel. See Deecke, *Erläuterungen zur lateinischen Schulgrammatik*, p. 8, Zusatz 2.

CHAPTER II.

PRONUNCIATION.

3. **Sources of Information.** — Our sources of knowledge concerning the ancient pronunciation of Latin are the following :

a) *Statements of Roman writers.* — Much has been left by the Roman grammarians on the subject of pronunciation, — far more in fact than is commonly supposed. The remains of the grammatical writers as collected and edited by Keil under the title *Grammatici Latini* (Leipzig, 1855–1880) fill eight large quarto volumes. These writers cover the entire field of grammar, and most of them devote more or less space to a systematic consideration of the sounds of the letters. As representative writers on this subject may be cited : Terentianus Maurus (fl. 185 A.D.), author of a work entitled *de Litteris, Syllabis, Metris* ; Marius Victorinus (fl. 350 A.D.) ; Martianus Capella (fourth or fifth century A.D. ; not in Keil's collection) ; Priscian (fl. 500 A.D.), author of the *Institutionum Grammaticarum Libri xviii*. Even the classical writers have often contributed valuable bits of information, notably Varro in his *de Lingua Latina*, Cicero in his rhetorical works, Quintilian in his *Institutio Oratoria*, and Aulus Gellius in his *Noctes Atticae*.

b) A second important source of evidence is found in *inscriptions*. The total body of these is very great. The *Corpus Inscriptionum Latinarum*, in process of publication since 1863, consists already of fifteen large folio volumes, some of them in several parts, and is not yet completed. These inscriptions disclose many peculiarities of orthography which are exceedingly instructive for the pronunciation. Thus such spellings as *vrps*,

PLEPS, by the side of VRBS, PLEBS, clearly indicate the assimilation of *b* to *p* before *s*. Even the blunders of the stone-cutters often give us valuable clues, as, for example, the spelling ACLETARVM for ATHLETARVM, which shows that the *th* was practically a *t*; otherwise we could not account for its confusion with *c*. See § 31.

c) *Greek transliterations of Latin words* constitute a third source of knowledge. Not only Greek writers (especially the historians of Roman affairs), but also Greek inscriptions, afford us abundant evidence of this kind. Thus the Greek Κικέρων (*Cicero*) furnishes support for the *k*-sound of Latin *c*; while Λιονία and Ουαλεντία bear similarly upon the *w*-sound of Latin *v*. The inscriptions are naturally much more trustworthy guides in this matter than our texts of the Greek authors, for we can never be certain that the Mss. have not undergone alterations in the process of transmission to modern times.

d) *The Romance Languages* also, within limits, may be utilized in determining the sounds of Latin. See Gröber's *Grundriss der Romanischen Philologie*, Vol. I., Strassburg, 1888; W. Meyer-Lübke, *Grammatik der Romanischen Sprachen*, Vol. I., Leipzig, 1890.

e) *The sound-changes of Latin itself*, as analyzed by etymological investigation. Modern scholars, particularly in the last fifty years, have done much to promote the scientific study of Latin sounds and forms, and, while much remains to be done, the ultimate solution of many problems has already been reached. As representative works in this field may be cited :

BRUGMANN, K. *Grundriss der Vergleichenden Grammatik der Indogermanischen Sprachen*. Vol. I., 2d ed. Strassburg, 1897.

BRUGMANN, K. *Kurze Vergleichende Grammatik der Indogermanischen Sprachen*. Strassburg, 1902.

STOLZ, F. *Lateinische Grammatik* in MÜLLER'S *Handbuch der Klassischen Altertumswissenschaft*. Vol. II., 3d ed. Munich, 1900.

- STOLZ, F. *Lautehre der Lateinischen Sprache*. Leipzig, 1894.
 LINDSAY, W. M. *The Latin Language*. Oxford, 1894.
 GILES, P. *A Short Manual of Comparative Philology for Classical Students*. 2d ed. London, 1901.
 SOMMER, F. *Handbuch der Lateinischen Laut- und Formenlehre*. Heidelberg, 1902.
 RIEMANN, O., et GOELZER, H. *Grammaire Comparée du Grec et du Latin*. Vol. I. Paris, 1897.
 HENRY, V. *Grammaire Comparée du Grec et Latin*. 5th ed. Paris, 1894.

As special works on pronunciation alone may be cited :

- SEELMANN, E. *Die Aussprache des Latein*. Heilbronn, 1885. The most important work on the subject yet published.
 ROBY, H. J. *Latin Grammar*. Vol I., 4th ed. pp. xxx-xc. London, 1881.
 ELLIS, ALEXANDER. *The Quantitative Pronunciation of Latin*. London, 1874. A discussion of special problems.

See also the chapter on 'Pronunciation' in the work of Lindsay above cited.

SUMMARY OF THE EVIDENCE.

THE VOWELS.

4. A. The consensus of the Romance languages indicates clearly that \bar{a} was pronounced substantially as in English *father*. In the absence of any specific evidence to the contrary, we may safely believe that \check{a} had the same sound *qualitatively*; in *quantity*, of course, it was less prolonged.

5. E. Long *e* was probably *close*, *i.e.* spoken with the vocal organs (more particularly the tongue and hard palate) nearer together than in the utterance of short *e*. Short *e*, on the other hand, was *open*, *i.e.* spoken with the tongue and hard palate relatively further apart. These differences in the pronunciation of \bar{e} and \check{e} are confirmed by the testimony of the grammarians, *e.g.* Marius Victorinus (Keil, vi. 33. 3); Servius (Keil, iv. 421. 17); Pompeius (Keil, v. 102. 4). The Romance languages also, though they have lost the original quantitative distinctions of

the Latin, have preserved with great fidelity the qualitative distinctions of the close and open *e*. See § 36. 5. It is to be noted that the relation between Latin \bar{e} and \check{e} stands in marked contrast with the relation existing between Greek η and ϵ . In Greek it was the long *e*-sound (η) that was open; ϵ was close. It should further be observed that in our normal English speech it is unusual and difficult to pronounce a pure \bar{e} . We regularly add an \check{i} -sound and pronounce a diphthong, $\bar{e}\check{i}$, e.g. in *fatal*, *paper*, etc.

6. I. 1. Long *i* was relatively closer than short *i*, as shown by the fact that \bar{i} appears unchanged in Romance words descended from the Latin, while \check{i} regularly appears as *e*. This relatively open character of \check{i} is also indicated by the occasional occurrence of \check{e} for \check{i} in Latin inscriptions, e.g. TEMPESTATEBVS (= *ibus*).

2. Before the labials *p*, *b*, *f*, *m*, an earlier \check{u} changed to \check{i} in many words at about the close of the Republican period. This is confined regularly to unaccented syllables. Examples are :

<i>recuperō</i>	<i>reciperō</i>
<i>libidō</i>	<i>libidō</i>
<i>pontifex</i>	<i>pontifex</i>
<i>lacruma</i>	<i>lacrima</i>
<i>maxumus, optumus, etc.</i>	<i>maximus, optimus.</i>

Quintilian, i. 7. 21, tells us that Julius Caesar was said to have been the first to introduce the new orthography. In i. 4. 8 Quintilian further states that the sound was intermediate between *i* and *u*. The Emperor Claudius, it will be remembered, endeavored to secure recognition for a special character (†) to represent this intermediate sound, which probably was approximately that of French *u*, German *ü*. This view gains support from the occasional employment of *y* for *i* in words of the category under discussion, e.g. CONTYBERNALIS CIL. ix. 2608; ILLACRYMANT. This *y* had the sound of *ü*. See below under *y*.

7. **O.** Long *o* was *close*, *i.e.* nearer the *u*-sound; short *o* was relatively open, that is, nearer the *a*-sound. This is clearly indicated by the descriptions of the sound as given by the Roman grammarians, *e.g.* Terentianus Maurus (Keil, vi. 329. 130-134); Marius Victorinus (Keil, vi. 33. 3-8); Servius (Keil, vi. 421. 17-19); it is further confirmed by the testimony of the Romance languages, which, as in case of *e* (see above), have faithfully preserved the qualitative character of Latin *ō* and *ǫ*, while they have lost the original quantitative distinction. See § 36. 5.

Short *o* should never be pronounced like English *ǫ* in *hot*, *top*, *rock*, *not*, *etc.* English *ǫ* in these words really has a short *a*-sound. Latin *ǫ* was a genuine *o*-sound. English *obey* and *melody* well exemplify it.

8. **U.** Short *u* was relatively more open than *ū*, as is shown by the frequency with which Latin inscriptions show *ǫ* for *ū*, as *ERODITVS*, *SECONDVVS*, *NOMERO*. The Romance languages also have *o* for Latin *ū*, as Italian *souera* (*super*); *ove* (*ubi*), *etc.*

9. **Y.** In conformity with its origin, Latin *y* (= Greek *υ*; see § 1. 5) had the sound of French *u*, German *ü*. Cf. Quintilian, xii. 10. 27, who mentions the sound as different from any existent in native Latin words. See Blass, *Pronunciation of Greek*, § 12.

THE DIPHTHONGS.

10. **AE. I.** The original form of this diphthong was *ai*, a spelling which prevailed till about 100 B.C., *e.g.* *AIDILIS*, *QVAIRATIS* in the Scipio inscriptions (CIL. i. 32. 34). The sound was a genuine diphthong (that of *ai* in English *aisle*), and continued such throughout the classical period. Cf. the use of *ai* in Greek transliteration of Latin words, *e.g.* *πραιτωρ*, *Καίσαρ*. Terentius Scaurus (first half of second century A.D.) bears testimony to the diphthongal character of the sound, when he says (Keil, vii. 16. 9),

à propos of the orthography, that *ae* is a more accurate designation than *ai*, as the second element is an *e*-sound. He thus clearly indicates that there was a second element in the combination, *i.e.* that the sound was diphthongal. This difference between *ai* and *ae*, though a real and perceptible one, was probably not very great.

2. By the fourth century A.D., however, *ae* had altered its character and had become a monophthong. This change had begun in the first century A.D. or even earlier. It originated probably in the rustic and provincial speech, but did not become general till late. Conclusive evidence of the new pronunciation is found in the frequent occurrence in inscriptions of such spellings as CESAR, HEC (= *haec*), QVESTOR, *etc.* But this orthography does not become frequent till after 300 A.D. See Seelmann, *Aussprache des Latein*, p. 224 f.

11. OE. The earlier form of *oe* was *oi*. But *oi* regularly developed to *ū*, *e.g.* *ūtilis* for earlier *oitilis*; *ūnus* for *oinos*. In a few words *oi* resisted this change and became later *oe*, *e.g.* *moenia* (yet *mūniō*), *foedus*, *etc.* The sound was a genuine diphthong throughout the classical period. In the vulgar language we find traces of a monophthongal pronunciation in the third and fourth centuries A.D., a change which ultimately became prevalent. The evidence tends to show that *ae*, *oe*, and *e* in the late centuries became extremely similar in sound, a fact which gives us the key to the hopeless confusion of spelling in our mediaeval Mss. of the Latin writers. Thus we find *caelum* written as *coelum*, a spelling doubtless suggested in part by its fancied derivation from the Greek κοῖλος 'hollow'; *cēna*, 'dinner,' appears variously as *caena* and *coena*, the latter spelling being perhaps a result of association with Greek κοινός 'common,' *i.e.* 'the common meal'; *nē*, the asseverative particle, is often written *nae*, probably another instance of Greek influence. Cf. *vai* 'verily.' Other instances of

confusion are *cerimōnia* for *caerimōnia*; *cemētērium* for *coemētērium* (Gr. κοιμητήριον); *moestus* for *maestus*; *foemina* for *fēmina*; *caeteri* for *cēteri* (probably owing to the influence of Gr. καὶ ἕτεροι); *coelebs* for *caelebs*; *coecus* for *caecus*. Some of these false forms are unfortunately still printed in our texts of the classical writers.

12. AU was a true diphthong, pronounced like Eng. *ow* in *how*. Cf. Greek transliterations of Latin proper names such as Παουλλίνη (*Paulina*), Φαοστῖνος (*Faustinus*).

13. EU appears in Latin in only a few words, and in these is of secondary origin. Primitive Latin *eu* early became *ou*, whence *ū*. The chief Latin words that have *eu* are: *ceu*, *neu*, *seu*, *heu*. The combination appears also in numerous proper names borrowed from the Greek, e.g. *Eurōpa*, *Teucer*. In all these the sound was that of a genuine diphthong, i.e. an *e*-sound quickly followed by an *u*-sound, both being uttered under one stress.

14. UI appears to have been a genuine diphthong in *cui*, *huic*, and *hui* (the interjection). In the first two of these words *ui* was certainly of secondary origin. Quintilian tells us (i. 7. 27) that in his boyhood (about 50 A.D.) *quoi* was still in use, and that its pronunciation was substantially identical with that of *quī* (the Nom.). Some scholars have accordingly inferred that *quī* and *cui* were simply graphically distinct, being alike in pronunciation. Consistently with this view they regard the *u* in *cui* as = *v*, and mark the *i* long, viz. *cūī*. But if the facts were thus, we should expect *cui*, when resolved into two syllables in verse by metrical license, to be an iambus (∪ —). Such is not the case. On the other hand, we find it appearing as a pyrrhic (∪ ∪), and that, too, at just about the time when, if we may credit Quintilian, *cui* began to supersede *quoi*, viz. soon after 50 A.D. Apparently the earliest instance of the resolution mentioned is in Seneca, *Troades*

852 *cūicumque* (about 55 A.D.). Subsequently, in Martial and Juvenal, such resolutions are frequent. See Neue, *Formenlehre der Lateinischen Sprache*, 3d ed., ii. p. 454. Very late writers (e.g. Prudentius, 400 A.D., Venantius Fortunatus, 600 A.D.), it is true, sometimes have *cūi* in verse, but there is apparently no trace of any such resolution in the early centuries of the Empire. Another argument may be found in the verse treatment of *huic*. The *ui* in both *huic* and *cui* is obviously of the same nature, and those who write *cūi* also write *huīc*. But if *huic* were *huīc*, then *hu-* must stand for *hv-*, since the word is a monosyllable. But if it begins with *hv-*, it would not permit elision of a preceding vowel in poetry. But elision *does* occur before *huic*. Therefore *huic* begins with *hu-*. That being the case and the word being monosyllabic, *ui* goes together to form a diphthong, the *i* being short, as in all diphthongs ending in *i*. The *i* of *huic* and *cui* would therefore seem to have been short, and to have blended with the *u* to produce a diphthong. It must, of course, be conceded that the pronunciation of *cui* could not have been widely different from *quī*; yet it must have been sufficiently so to keep the two words distinctly separate in Roman speech, a view which receives the very strongest confirmation in the fact that the modern Italian has *chi* as the descendant of Latin *quī*, but *cui* (with diphthongal *ui*) as the descendant of Latin *cui*.

THE CONSONANTS.

THE SEMIVOWELS, *j*, *v*.

15. J. 1. *J* (Seelmann, *Aussprache des Latein*, p. 231 ff.) was like our *y* in *yes*. Evidences :

a) A single character (*l*) sufficed with the Romans to indicate both the vowel *i* and the consonant *j* (*i cōnsonāns*). This would indicate a close proximity in sound between *i* and *j*, a proximity manifestly existing if Latin *j* was English *y*. Cf., for example,

English *New York* with a hypothetical *New Ī-ork*. In any English word the vowel *i* may easily be made to pass into the semivowel *y* by energetically stressing either the preceding or the following vowel.

b) The Roman grammarians nowhere suggest any essential difference in sound between the vowel and consonant functions of the character, as they almost certainly would have done, had the consonant been other than the corresponding semivowel. On the other hand, the grammarians repeatedly suggest a close proximity in the pronunciation of *i* and *j*. Thus Nigidius Figulus is cited by Gellius (*Noctes Atticae*, xix. 14. 6) as warning against the conception that *I* in *IAM*, *IECVR*, *IOCVS* is a vowel. Such a warning can have no meaning whatever, except upon the assumption that the sound of *j* was very close to that of *i*, *i.e.* was the semivowel *y*. Cf. Quintilian, i. 4. 10.

c) In the poets, *i*, when followed by another vowel, often becomes consonantal, uniting with the preceding consonant to make position; *e.g.* *abietis*, *parietem*, *ariete* become *abjetis*, *par-jetem*, *arjete*. In these cases the consonant sound can have been none other than that of the semivowel *y*. Cf. also *nunciam* (trisyllabic), compounded of *nunc* and *jam*; *etiam*, compounded of *et* and *jam*.

d) Greek transliterations of Latin words employ *ι* as the nearest equivalent of Latin *j*, *e.g.* *Ἰούλιος* (= *Julius*).

2. In the last centuries of the Empire, *j* seems to have progressed, at least in the vulgar speech, to a genuine spirant, probably similar in sound to that of *z* in the English word *azure*. Thus in late inscriptions (from the third century on) we find such spellings as *ZESU* (= *Jesu*), *ZUNIOR* (= *junior*), *SUSTUS* (= *justus*), *GIOVE* (= *Jove*). Cf. Seelmann, *Aussprache des Latein*, p. 239.

16. V. 1. *V* is a labial semivowel, with the sound of English *w*. It corresponds to the vowel *u*, just as *j* corresponds to the vowel *i*.

The evidence :

a) A single character (V) sufficed with the Romans to indicate the vowel *u* (*u vōcālis*) and the consonant *u* (*u cōnsonāns*). This indicates a close proximity in sound between *u* and *v*, — a proximity which manifestly existed, if Latin *v* was English *w*. For the vowel *u* naturally passes into *w* before a vowel whenever either the preceding or following syllable is energetically stressed. For example, *tenuia* easily becomes *tenvia*, and must repeatedly be so read in verse.

b) The Roman grammarians (at least down to the close of the first century A.D.) nowhere suggest any essential difference in sound between the vowel and consonant functions of the character V, no more than in the case of the analogous l. On the other hand, just as in the case of l, they repeatedly suggest that *u* and *v* were very similar. Thus Nigidius Figulus, cited above in connection with the discussion of *j*, observes in the same passage (Gellius, xix. 14. 6) that initial V in VALERIVS, VOLVSIVS, is not a vowel, an observation which would be pointless unless the sound of *v* had been closely similar to that of *u*, i.e. had been that of *w*. Quintilian in i. 4. 10 gives a similar warning.

c) The same Nigidius Figulus (Gellius, x. 4. 4) says that in pronouncing *vōs* we thrust out the edges of our lips, which conforms physiologically to the pronunciation of *v* as English *w*.

d) The Greek ordinarily transliterates Latin *v* by means of *ov*, as Ουαλέριος (*Valerius*), Ουολσκοί (*Volscī*), Λιβία (*Livia*).

e) *U* and *v* often interchange in the same words. Thus early Latin *lā-ru-a* (e.g. Plautus, *Captivi*, 598) appears later as a dissyllable, *lārva*. Similarly *mī-lu-os* appears later as *mīlvus*. In verse, *silva* occurs repeatedly as *si-lu-a*, e.g. Horace, *Odes*, i. 23. 4. On the other hand, *tenuis*, *puella*, etc., often appear as *tenvis*, *pvella*, etc. This interchange is conceivable only upon the supposition that the vowel and consonant sounds were closely akin. Cf. also Velius Longus (close of the first century A.D.) in Keil, vii. 75. 10,

to the effect that *a-cu-am*, 'I shall sharpen,' and *aquam*, 'water' (where *qu* is simply the traditional inconsistent spelling for *qv*), were liable to confusion in his day. Caesellius (see Seelmann, *Aussprache des Latein*, p. 234) cannot say whether *tenuis* is a disyllable or a trisyllable; while in the Romance languages we sometimes find doublets pointing to parallel Latin forms, one with *u vōcālis*, another with *u cōnsonāns*, e.g. Old French *teneve* (representing a Latin *te-nu-is*) and *tenvē* (representing a Latin *ten-vis*). Italian *soave* points to the existence of a Latin *su-ā-vis* by the side of *suā-* (i.e. *svā-*) *vis*. Cf. Seelmann, p. 234.

f) The phonetic changes incident to word-formation also point in the direction of the *w*-sound of *v*. Thus from *faveō* (root *fav-*) we get *fau-tor* (for **fav-tor*); from *lavō* (root *lav-*) we get *lau-tus* (for **lav-tus*). In such cases the semivowel *v* naturally becomes the vowel *u* and combines with the preceding vowel to form a diphthong. Had *v* been a spirant, either labiodental, like our English *v*, or bilabial, it would naturally have become *f* before *t* in the foregoing examples. Cf., for example, our English *haf to* (colloquial) for *hav(e) to*.

The evidence given under f) holds, of course, only for the formative period of the language; but it is valuable as corroborative testimony. For Latin *v* is all the more likely to have been a semivowel in the historical period, if it was such immediately anterior to that period.

g) The contracted verb-forms, such as *amāstī* for *amāvistī*, *dēlēstī* for *dēlēvistī*, *audīstī* for *audīvistī*, *commōssem* for *commōvissem*, all point to a semi-vocalic sound for *v*, since this sound easily disappears between vowels in an unstressed syllable. Cf. English *Hawarden*, pronounced *Hārden*; *toward*, pronounced *tōrd*.

h) Several anecdotes found among ancient writers give further confirmation of the similarity in sound of *u* and *v*. Thus Cicero (*de Divinatione*, ii. 84) relates that, when Marcus Crassus

was preparing to set sail from Brundisium on his ill-fated expedition to the East, he heard a vender of figs on the street cry out *Cauneās*, really the name of a variety of figs, but which Cicero suggests was intended by the gods as a warning to Crassus, *viz. cav(e) n(ē) eās, don't go.*

2. While the above evidence may be accepted as fairly conclusive for the pronunciation of Lat. *v* as *w* in the best period, indications are not wanting that *v* had begun to change to a spirant sound before the period of the decline. The earliest testimony on this point is that of Velius Longus (close of the first century A.D.), who speaks of *v* as having a certain *aspirātiō*, *e.g.* in *valente, primitivō* (Keil, vii. 58. 17). This reference to *aspirātiō* hints at the development of *v* from its earlier value as a bilabial (*i.e.* produced by the two lips) semivowel to a bilabial spirant, somewhat similar to our English *v*, except that our *v* is labio-dental (*i.e.* produced by the teeth and lower lip). This view is confirmed by the fact that, beginning with the second century A.D., we note that *v* is confused with *b*, which had also become a bilabial spirant at this period. This confusion, which increases as time goes on, reaches its height in the third century A.D. Examples are: *BIGINTI* (= *vigintī*); *VENE* (= *bene*); *FAVIO* (= *Fabiō*).

3. Some scholars have sought further confirmation of the spirant character for the period referred to (100 A.D. and afterwards) in the use of Greek β as a transliteration of Latin *v*. Beginning with about 100 A.D. we find β frequently employed in Greek inscriptions in place of earlier *ov* for such transliterations, *e.g.* $\kappa\omicron\nu\beta\acute{\epsilon}\nu\tau\omicron\varsigma$ (*conventus*); $\beta\acute{\epsilon}\rho\nu\alpha$ (*verna*); $\text{Καλ}\beta\acute{\epsilon}\iota\nu\omicron\varsigma$ (*Calvinus*). Similarly our text of Plutarch (about 100 A.D.) usually has β in Latin words (*e.g.* Βαλέριος , Βένους = *Venus*) where earlier Greek writers mostly employed *ov*. Now it is believed (*cf.* Blass, *Pronunciation of Greek*, p. 109) that Greek β at this time (beginning of the second century A.D.) had become a bilabial spirant. How-

ever this may be, little support would be gained from that fact for the pronunciation of Latin *v*. For while it is true that the use of β for *v* assumes great frequency from 100 A.D., yet the earlier spelling *ov* still remains the predominant one. Eckinger, *Orthographie Lateinischer Wörter in Griechischen Inschriften*, p. 87, gives 234 instances of *ov* as against 100 of β in Greek inscriptions of the second century A.D., while often the same inscription exhibits both spellings. Moreover, occasional instances of $\beta = v$ occur as early as the last years of the Republic, Eckinger, p. 87, cites five examples from the first century B.C., and twenty one from the first century A.D. The facts seem to indicate that the Latin sound was not adequately represented by either *ov* or β ; consequently no permanent equivalent was ever adopted. It is, therefore, perfectly conceivable that Latin *v* should have been transliterated by Greek β , even at a time when the latter sound had not progressed to its spirant stage. In fact, it is quite possible that the confusion in Latin itself, which resulted in writing *b* for *v*, may have contributed to the increasing frequency in the employment of β as against earlier *ov* in Greek transliterations of Latin words. The two phenomena coincide so accurately in time that the connection suggested becomes extremely probable.

Even if Greek β had by 100 A.D. become a bilabial spirant (as it certainly did ultimately), yet this would not necessarily prove anything for the pronunciation of Latin *v*. For the bilabial spirant is very easily confused with the semivowel. Thus the dialectal pronunciation of German *Wein*, *Winter* with an initial bilabial spirant easily deceives American and English travellers, to whom this sound is not familiar, and produces the impression that an English *w* is pronounced. The evidence of the Greek, therefore, is purely negative, and while it seems probable, as already indicated, that Latin *v* at about the beginning of the second century A.D. had begun to become a bilabial spirant, this

conclusion rests upon other grounds than the evidence of Greek transliterations.

4. Gothic and Anglo-Saxon loan-words have been thought by some to confirm the *w*-sound of Latin *v*, but without reason. Gothic and Anglo-Saxon *w*, it is true, appears regularly as the representative of *v* in words borrowed from the Latin, *e.g.* Gothic *wein*, 'wine' (Lat. *vīnum*); *aiwaggeli*, 'gospel' (Lat. *evangelium*); Anglo-Saxon *weall*, 'wall' (Lat. *vāllum*); *-wic*, 'town' (Lat. *vīcus*). But here again it is not only possible but extremely probable that the Gothic and Anglo-Saxon gave only an approximate representation of the Latin sound. Gothic could hardly have borrowed from the Latin before the fourth century, Anglo-Saxon not before the fifth, and it has been shown above that at this period Latin *v* had already become a bilabial spirant.

5. Others have cited Claudius's attempted introduction of *ɹ* for *v* as an indication that *v*, as early as Claudius's day (50 A.D.), had progressed beyond the semivocalic stage. Claudius, it is urged, while suggesting the employment of a new character for *u cōnsonāns* (*v*), did not suggest a new character for *i cōnsonāns* (*j*). Hence it is claimed that the relation of *v* to *u*, at this time, must have been different from that of *j* to *i*. As *j* was a semivowel, *v*, it is claimed, could have been nothing less than a spirant. But these conclusions would be valid only upon the assumption that Claudius was a competent phonetic observer, and was not acting from mere caprice. Neither of these assumptions would be safe. Moreover, there is no other indication that *v* had progressed beyond its value as a semivowel as early as Claudius's day.

6. It may be added in conclusion that the development of Latin *v* was not complete even when the sound had passed from that of a semivowel to that of a bilabial spirant. Later still (fifth century A.D.?) it became a labio-dental spirant (Eng. *v*), and with that value passed into the Romance.

THE LIQUIDS, *l*, *r*.

17. **L** seems to have been pronounced differently, according to its position in a word. No fewer than three different sounds of the letter were recognized by Pliny the Elder, as cited by Priscian (Keil, ii. 29. 9), viz. 1) an *exilis sonus*, as in the second *l* of *ille*, *Metellus*; 2) a *pinguis sonus*, after a consonant or at the end of a word or syllable, as in *clārus*, *sōl*, *silva*; 3) a *medius sonus*, viz. when initial, as in *lectus*. Just what the differences were which were involved in these three modes of articulation cannot now be determined. Lindsay (*Latin Language*, p. 90) thinks that Pliny's *exilis sonus* and *medius sonus* were our normal English *l*, as is the case in the Italian descendants of the Latin words cited by Pliny. The *pinguis sonus*, Lindsay suggests, consisted in an *l*-glide preceding or following the *l* itself, e.g. *a'lter cl'ārus*. The basis for this view he finds in the Romance development of this *l pingue*; e.g. *clārus* becomes Italian *chiaro*; *flūmen* becomes *fiume*; *alter* becomes French *autre*.

18. **R** was trilled with the tip of the tongue, as is clearly described by Terentianus Maurus (Keil, vi. 332. 238 f.) and Marius Victorinus (Keil, vi. 34. 15). The name *littera canina*, given to *r* as early as Lucilius (ix. 29, M.), agrees excellently with the enunciation attributed to the letter.

THE NASALS, *m*, *n*.

19. **M**. Initial and medial *m* probably had the sound of normal English *m*. As regards final *m*, the true pronunciation can probably never be satisfactorily determined. When the following word began with a vowel, final *m* was only imperfectly uttered. Cf. Quintilian, ix. 4. 40: 'When *m* is final and comes in contact with the initial vowel of the following word so that it can pass over to the latter, though it is written, yet it is only slightly uttered, as in

multum ille, quantum erat, so as to give the sound of a new letter, as it were. For it does not absolutely vanish, but is obscured, and is a sort of sign that the two vowels do not become merged.' In ix. 4. 39 Quintilian tells us that Cato the Elder wrote *diee* for *diem*, evidently in recognition of the vanishing value of the final nasal. Velius Longus also tells us (Keil, vii. 80, 12 ff.) that Verrius Flaccus, who lived under Augustus, proposed a mutilated *M*, viz. *M*, to indicate the sound of final *m* before an initial vowel. Seelmann (*Aussprache des Latein*, p. 356), following the above statement of Quintilian, defines the sound in question as a 'bilabial nasal spirant with partial closure.' This seems a just statement. Cf. also Lindsay, *Latin Language*, p. 62. Evidently the sound must have been quite inconsiderable, as it did not interfere with the slurring of final syllables in *-m* with a following initial vowel, as is abundantly shown in poetry by the frequency of elision. Ellis (*Quantitative Pronunciation of Latin*, p. 60 ff., especially p. 65) interprets the testimony of Quintilian above cited to mean that final *m* was not omitted (*neque eximitur*), but was inaudible (*obscuratur*) before an initial vowel. The same scholar also maintains that every final *m* was inaudible, irrespective of the initial sound of the following word. In case this initial sound was a consonant, Ellis (pp. 55, 65) holds that the consonant was doubled in pronunciation; e.g. *quōrum pars*, he thinks, was pronounced *quōruppars*, etc. This view, however, is based on the improbable assumption that the Italian with its *giammai* (for *giamai*), *ovvero* (for *o vero*), etc., gives the clue to the pronunciation of Latin final *m*. Latin inscriptions, it is true, in the earliest times show that final *m* was frequently omitted in writing. Thus the Scipio inscriptions, the earliest of which may antedate 250 B.C., show *m* omitted before consonants as well as before vowels, but in good inscriptions of the classical period final *m* was not omitted with any frequency; hence no argument can be drawn from this source.

20. **N.** 1. *N* was the dental nasal, as *m* was the labial. When initial, *n* could hardly have differed materially from English *n* in the same situation. The same is true also of *n* in the interior of a word when followed by other dental sounds (as *t*, *d*, *s*, *n*) or a vowel. Before the gutturals, *n* took on the sound of *ng* in *sing*, e.g. in *angō*, *uncus*; i.e. *n* here became the guttural nasal, a sound as different from dental *n* as is *m*, and quite as much entitled to representation by a separate character. Nigidius Figulus recognized the individuality of the sound in calling it *n-adulterīnum* (Gellius, xix. 14. 7). Certain Roman writers, according to Priscian (Keil, ii. 30. 13), followed the analogy of the Greek, and used *g* (= *γ* nasal) for the *n-adulterīnum*, e.g. *Agchīsēs*, *agceps*, *aggulus*. The Greek phoneticians gave *γ* in such situations the name *Agma* (as distinguished from *Gamma*), and their Roman successors sometimes employed the same designation for the sound, e.g. Priscian in the passage just cited.

2. The vowel before *nf*, *ns*, as is well known, was regularly long in Latin. See § 37. Some have assumed, in consequence, that a nasal vowel was pronounced in such cases, particularly Johannes Schmidt (*Zur Geschichte des Indogermanischen Vokalismus*, I. p. 98 ff.). The chief basis of this hypothesis was found in the omission of *n* before *s* in inscriptions, e.g. COSOL (for *cōnsul*), CESOR, TRASITV. Adjectives in *-ēnsimus* and adverbs in *-iēns* were also often written *-ēsimus*, *-iēs*, e.g. *vicēsimus* or *vicēnsimus*; *vīciēs* or *vīciēns*. Velius Longus (Keil, vii. 78-79) tells us that Cicero pronounced *forēnsia* as *forēsia*, and *Megalēnsia* as *Megalēsia*, while in adjectives in *-ōsus* the *n* was permanently lost. Greek transliterations of Latin words also frequently show *σ* for *νσ* (*vs*), e.g. Κλήμης (*Clēmēns*); Κησωρίνος. But all this evidence may indicate nothing more than that *n* before *s* was unstable and inclined to disappear. Whatever conclusion be drawn with regard to the nasalization of the vowel before *ns* would seem to hold also for the vowel before *n* when followed by other dentals,

viz. before *nt* and *nd*. For here, too, the *n* shows quite as strong a tendency to disappear, if we may judge by the testimony of inscriptions, *e.g.* SECVDO (= *secundō*); TESTAMETO (= *testamentō*). No instance of the disappearance of *n* before *f* occurs prior to the fourth century A.D., and even then the phenomenon is of extremely rare occurrence, being confined to four instances, all of which are in the word *inferus*.

See the discussion of Seelmann, *Aussprache des Latein*, pp. 283-290.

3. It should be added that the omission of the nasal occurs sporadically in case of *m* when followed by labial sounds, as *Decebris* (= *Decembris*); *Capānum* (= *Campānum*); so also in case of *n-adulterīnum* before gutturals, as *iquīrant* (= *inquīrant*); *prīcipis* (= *prīncipis*). The phenomenon under discussion is, accordingly, a general one, and may be stated thus: The Latin nasals *m* (labial), *n* (dental), and *n-adulterīnum* (guttural), exhibit a tendency to disappear before labial, dental, and guttural sounds respectively.

4. **GN.** Many scholars hold that *gn* was pronounced as *ngn*, *i.e.* as *n-adulterīnum* + *n*. The evidence for this view lies mainly in the fact that *e* before *gn* not infrequently changes to *i*, *e.g.* *dignus* for **deg-nus* (from **dec-nus*; see § 73). Now it is a regular law that this change takes place before *ng*, *e.g.* *tingō* for **tengō* (§ 73); hence the inference that *gn* in such cases was pronounced *ngn*. See Brugmann, *Grundriss*, I², p. 122; Sommer, *Handbuch der Lateinischen Laut- und Formenlehre*, p. 241. But the Roman grammarians nowhere attest this pronunciation of *gn* as *ngn*, and in view of their silence it is doubtful whether the considerations urged by Brugmann and Sommer are sufficiently weighty to warrant the adoption of their view.

5. Besides the three nasals already considered (*m*, *n*, and *n-adulterīnum*), Seelmann (*Aussprache des Latein*, p. 270) recognizes another, midway in sound between *m* and *n*. The evidence

for the existence of this sound he finds in the statement of Marius Victorinus (Keil, vi. 16. 4 ff.) to the effect that such an intermediate sound (neither *m* nor *n*) was recognized in antiquity. Marius Victorinus compares the sound in question with the sound of the Greek nasal in $\sigma\acute{\alpha}\mu\beta\nu\xi$, where likewise, he observes, neither *v* nor μ accurately designates the pronunciation. Seelmann suggests that such inscriptional forms as QVAMTA, TAMTA, DAMDVM, SENTENTIAM on the one hand, and DECENBRIS, SENPER, PONPA, INCONPARABILIS on the other, support by their vacillating spelling the theory propounded. The facts, however, do not seem sufficiently clear to warrant a positive conclusion in this matter.

THE SPIRANTS, *f*, *s*, *h*.

21. F. *F* is the labial spirant. In the earlier period it is probable that *f* was bilabial. This theory accords with the origin of *f*, which in most cases is the descendant of an original *bh*; it agrees also with such spellings as COMFLVONT, COMVALLEM of the Minucii inscription, CIL. i. 199 (122 B.C.). Subsequently *f* became a labio-dental spirant as it is in English and in most modern European languages. At just what time this change took place is uncertain. It was complete by the close of the second century A.D., as appears from the testimony of Terentianus Maurus (Keil, vi. 332. 227).

22. S. *S* was a voiceless dental spirant, like English *s* in *sin*. Some scholars have thought that intervocalic *s* was voiced in Latin (*i.e.* sounded like English *s* in *these*), but there is no valid support for this view, nor do the Roman grammarians anywhere hint at more than a single sound for the letter. The Gothic in loan-words transliterates intervocalic Latin *s* by *z*, which represented a voiceless sound in Gothic, *e.g.* *Kaisar* (Lat. *Caesar*). The Gothic possessed also a character for the voiced *s*-sound

(i.e. *z*), and would undoubtedly have made use of it, had the Latin intervocalic *s* been voiced.

23. H. *H* was a guttural spirant and was voiceless like English *h*. The same uncertainty manifested itself in the employment of initial *h*, as is noticeable among the lower classes in England. As a result of this uncertainty, words etymologically entitled to initial *h* frequently dropped it in the speech of the less cultivated, while other words acquired an *h* to which they were not historically entitled. Thus *harēna*, *haruspex*, *hirundō*, *holus*, represent the correct spelling; but these same words were frequently pronounced *arēna*, *aruspex*, etc., and appear repeatedly in that form in our Mss. of the classical authors. Occasionally a word permanently lost its initial *h* even in the speech of the educated. A case in point is *ānser*, which comes from an Indo-Eur. word with initial *gh*, and should appear in Latin as *hānser* (§ 97. 3). On the other hand *erus*, *ūmor*, *umerus* are the correct forms, but these were frequently supplanted by *herus*, *hūmor*, *humerus*. The Romans were fully conscious of their defects in this particular, and Catullus in his 84th poem humorously refers to one Arrius, who said *hīnsidiās* for *īnsidiās*, and *Hīōniōs* for *īoniōs*.

Intervocalic *h* easily vanished between like vowels, as is shown by such contractions as *nēmō* for **ne-hemō*; *prēndō* for *prehendō*; *praeda* for **prae-heda*; etc.

THE MUTES.

THE VOICELESS MUTES, *t*, *c*, *k*, *q*, *p*.

24. T. *T* was pronounced as in English *satın*. In English, *t* before *i* followed by another vowel is regularly assibilated, i.e. acquires an *sh*-sound, as, for example, in the word *rational*; but Latin *t* was always a pure *t* in the classical period. Cf. such Greek transliterations as *Οὐαλεντία* (*Valentia*). In late imperial

times (not before the fourth century) *ti* when followed by a vowel begins to show traces of assibilation. Inscriptions of this period exhibit such forms as VOCONSIVS (for *Vocontius*); SEPSIES (for *septiēs*). Probably this orthography was not exact, as the sound was rather that of our English *sh*; but the Latin had no more accurate designation. The phonetics of the change are as follows: An original *Vocontius*, for example, became first *Vocontyus*, i.e. the vowel *i* (very likely under the influence of extra stress upon the preceding syllable) become the semivowel *y*. In the next stage this semivowel became a spirant, the sound represented by German palatal *ch*, viz. *Vocont-chus*. From this, the transition to the assibilated pronunciation was easy and natural.

25. C. 1. *C* was always pronounced like *k*. This is abundantly proved by the evidence. Thus:

a) *C* and *k* interchange in certain words, e.g. *Caelius*, *Calendae*, *Carthago*.

b) We have the express testimony of Quintilian (i. 7. 10), who says: 'As regards *k*, it should not be used. Some write it before *a*, but *c* has the same sound before all vowels.'

c) In Greek transliterations of Latin words we always have *κ*, not only before *a*, *o*, *v*, but also before *ε*, *ι*, where if anywhere we should have expected the *s*-sound of *c* to have arisen. Examples are: *Κικέρων*, *Καίσαρ*.

d) Gothic and German loan-words borrowed from Latin (probably in the early centuries of the Christian era) show *k* for Latin *c* in all situations, e.g. Gothic *lukarn* (= Lat. *lūcerna*); *karkara* (= Lat. *carcer*); *Kaisar* (= *Caesar*); German *Keller* (= *cellārium*); *Kiste* (= *cista*).

e) The Old Umbrian of the Iguvine Tables uses in its enchoric alphabet *ϡ* for *c* and *ϣ* for *ç* (an *s*-like sound developed from *c* before *e* and *i*). The New Umbrian of the same tables is written in Latin characters, and uses *C* for *c*, but *S'* (or *S*)

for the *s*-like sound represented in Old Umbrian by *Ƀ*. This makes it clear that at the time the New Umbrian tablets were written, Latin *c* before *e* and *i* had not yet become assibilated. Otherwise the New Umbrian would not have resorted to the use of a special character (*S'* or *S*) to designate this sound. See Jones, *Classical Review*, No. 1, 1893. The exact date of the New Umbrian tablets is not certain, but they can hardly have been written many years before the beginning of the Christian era.

f) No Latin grammarian ever mentions more than one sound for *c*, as some one certainly would have done had *c* had an *s*-sound before *e* and *i*. In paradigms like *dīcō*, *dīcis*, *dīcīt*, the change of sound, had it occurred, would have been too striking to escape comment.

g) *Pulcher* (originally *pulcer*, and often so written in inscriptions) shows by its aspirated *c* (i.e. *ch*) that *c* must have been 'hard.' Similarly *anceps*, with its *n-adulterīnum*, shows that *c* could not have had the sound of *s*. Otherwise the nasal would not have become guttural, as we are assured it did.

2. Beginning with the fourth or fifth century A.D., *c* before *i* followed by a vowel becomes assibilated, exactly as explained above in the case of *t*. Inscriptions of this period exhibit such forms as FELISSIOSA (= *fēlīciōsa*); MARZIAE (= *Mārciae*). The phonetics of the change are precisely analogous to those already described under *t*. Later still, every *c* before *e* or *i* became *s*, e.g. PAZE (for *pāce*) in an inscription of the seventh century A.D.

3. This development of *ti* and *ci* (before vowels) to the same sibilant sound led naturally in mediaeval times to the greatest confusion of orthography in our Mss. of the Latin writers. Thus *condiciō* appears frequently as *conditiō*; *suspīciō* as *suspītiō*; *negōtium* as *negōcium*; *convīcium* as *convītium*. In the case of some of these words, the false forms have not yet been entirely eliminated from our texts of the classic writers.

4. *K* and *Q* are simply superfluous duplicates of *c*, as was

recognized by the Romans themselves. Cf. Terentianus Maurus (Keil, vi. 331. 204 f.).

26. **P.** *P* was apparently a plain English *p* and presents no peculiarities.

THE VOICED MUTES, *b, d, g*.

27. **B.** *B* was like English *b* except before *s* and *t*, where it had the sound of *p*. This was simply the result of the natural assimilation of the voiced sound to the voiceless. Inscriptions show repeated instances of the phonetic spelling, e.g. PLEPS, APSENS, OPTINVIT, OPSIDES, but ordinarily such words made a concession to the etymology, and were written with *b*. Quintilian (i. 7. 7) prescribes the use of *b*: 'When I pronounce *obtinuit* our rule of writing requires that the second letter be *b*; but the ear catches *p*.'

28. **D.** *D* was like English *d*. Late in imperial times *dī*, when followed by a vowel, became (through the medium of *dy-*) a sound somewhat like our *j*. The Romance languages retain this peculiarity, e.g. French *journée*, Italian *giorno*, from Latin *diurnus*.

Inscriptions show that final *d* had a tendency to become *t*, e.g. *aput*, *haut*, *at*, *quit*, for *apud*, *haud*, *ad*, *quid*. Mss. also exhibit the same spelling.

29. **G.** *G* had the sound of English *g* in *get*. That before *e* and *i* it did not have the sound of *g* in *gem*, seems clear from the following evidence:

a) The Roman grammarians give but a single sound for the letter. Had *g* before *i* been pronounced like our *j*, the alteration of sounds in a paradigm like *legō*, *legis*, or *lēgēs*, *lēgum*, would not have failed to elicit comment.

b) In the Greek transliteration of Latin words *g* is always represented by *γ*; e.g. Γέλλιος (*Gellius*).

30. DISTINCTION BETWEEN 'GUTTURAL' AND 'PALATAL.'— 'Guttural' and 'Palatal' are not interchangeable terms. Strictly speaking, 'Guttural' applies to the *c* (*k*) and *g* sounds produced in the throat, while 'Palatal' applies to those produced against the hard palate. The guttural or palatal character depends upon the following vowel. Before *a*, *o*, or *u* the *c* or *g*-sound is guttural; before *e* or *i* it is palatal. Cf. English *kill*, *gill* with *call*, *gall*. Latin *k* (used only before *a*; see § 1. 3) was, accordingly, always guttural; the same was the case with *q*, while *c* and *g* varied in character according to the following vowel.

THE ASPIRATES, *ph*, *ch*, *th*.

31. 1. The Latin originally had no aspirates of its own, and was not concerned with the representation of these sounds until the Romans began to borrow Greek words containing *φ*, *χ*, or *θ*. These Greek letters (as explained in the *Grammar*, § 2. 3) were equivalent to *p*, *c*, or *t* with a following *h*-sound.¹ It is not surprising, therefore, that at first the Romans rendered *φ*, *χ*, *θ* by *p*, *c*, *t* respectively. This is regular in early inscriptions (down to about 100 B.C.), e.g. CORINTVS, DELPIS, ACILES. In the *Captivi* of Plautus, verse 274, the evident pun on *Thalem* . . . *talentō*, shows that the *th* was felt as substantially a *t*, and in fact there can be little doubt that *t* is what Plautus actually wrote.

2. Beginning, however, with about 100 B. C., Greek *φ*, *χ*, *θ* came to be represented with increasing frequency in Latin by *ph*, *ch*, *th*, and by Cicero's day this had become the standard orthography. The multitude of Greek words employed in Latin at that time, along with the constantly increasing attention paid by educated Romans to the Greek language and to Greek culture generally, naturally led to this striving for greater exactness.

¹ Initial and final *p*, *c*, and *t*, in stressed syllables, in English are also uttered with aspiration, though we do not indicate this in writing. Examples are: *top*, *lock*, *pot*.

3. As a result we notice the aspirates gaining a foothold in certain genuine Latin words, *e.g.* *pulcher*, originally *pulcer*; *Gracchus* (after *Bacchus* = Βάκχος), originally *Graccus*; *Cethëgus*, originally *Cetëgus*. An English analogy is seen in such words as *island*, *rhyme*. *Island* comes from the Anglo-Saxon *īgland*, Middle English *īland*. The *s* was introduced at a comparatively recent date as a result of associating *īland* with French *isle* (from Latin *īnsula*). *Rhyme* comes from Anglo-Saxon *rim*, Middle English *rime*, 'number.' The spelling *rhyme* is due to the influence of *rhythm* (Greek ῥυθμός), with which *rime* was associated in the folk consciousness. Cicero (*Orator*, 48. 160) tells how he himself, in deference to popular usage, was forced to abandon the pronunciation *pulcer*, *triumpōs*, *Cetëgus*, *Kartāgō*, in favor of the aspirated forms, *pulcher*, *triumphōs*, *etc.* But he adds that he refused to pronounce an aspirate in *sepulcrum*, *corōna*, *lacrima*, and some other words, where apparently a popular tendency existed in favor of *ch*, *ph*, *th*, as against the genuine Latin *p*, *c*, *t*. Catullus, in the epigram already cited (*Carmen* 84), humorously alludes to Arrius's pronunciation of *commoda* as *chommoda*.

In *Bosphorus* (Βόσπορος) the Romans introduced an aspirate for a tenuis; yet the spelling *Bosporus* also occurs.

4. With the exception of *ph* the Latin aspirates retained their original character throughout the history of the language. A proof that *th* was still an aspirate in the time of the Empire is seen in the spelling ACLETARVM for *āthlētarum*, and ACLHETICVM for *āthlēticum*, in an inscription of about 360 A.D. (Wilmanns, No. 2639). Cf. also CIL. viii. 5352, TERMAS (= *thermas*); Huebner, *Inscriptiones Hispaniae Christianae*, 142, AETEREAS (= *aethereas*); and the variant *Chyesten* for *Thyesten* in Horace, *Odes*, i. 16. 17. This orthography is capable of explanation only on the ground that *th* was still very close to *t* (*viz.* *t* + *h*). For the confusion of *c* and *t*, cf. the occasional English pronunciation of *at least* as *ac least*. There is not the slightest indication that Latin *th*, either

in the flourishing period of the language or in its decline, had a spirant sound like our English *th* in *this* or *thin*. The Romance languages regularly have *t* as the descendant of Latin *th*, e.g. Italian *teatro* (Latin *theātrum*); *cattolico* (*catholicus*). Similarly *ch* must have always been either a genuine aspirate or else the simple mute *c*, as shown by the Italian in such words as *carta* (Lat. *charta*), *coro* (Lat. *chorus*).

5. As regards *ph*, the aspirate seems in late imperial times (not before the fourth century A.D.) to have developed into the spirant *f*. Some have thought that this change occurred much earlier, basing their opinion upon the fact that Greek *φ*, which was regularly represented in Latin by *ph*, was always employed to transliterate Latin *f*. But *φ* was simply the nearest equivalent that the Greek alphabet possessed for representing *f*. Quintilian (i. 4. 14) shows that the two sounds were quite different, by his account of the Greek witness mentioned by Cicero who could not pronounce the Latin word *Fundānius*. This seems to show that the Greeks, not having the sound of Latin *f* (a bilabial spirant), chose *φ* (a bilabial aspirate) as the nearest equivalent, very much as Slavs and Lithuanians to-day reproduce the *f* of modern languages by *p*.

In the speech of the educated classes at Rome, *ph* seems to have followed the history of *φ* in Greek. The latter sound, according to Blass (*Pronunciation of Greek*, § 28), did not become the equivalent of *f* before the third century A.D., a view substantiated for Latin by the interchange of *f* and *ph* in inscriptions of this and the following centuries. The phonetics of the change are as follows: First, we have *p* + *h*, i.e. the labial mute + a guttural spirant; secondly, the *h* is assimilated from the guttural spirant to the labial, *f* (i.e. *pf*); finally, the *p* is assimilated to *f*, giving *ff*, which is then simplified to *f*. Thus an original *Philippus* becomes successively *Pfilippus*, *Ffilippus*, *Filippus*. Cf. German *Pfalz* (the name of the district about Heidelberg).

The mediaeval Latin designation of this was *Palatium*, whence *Phalatium*, German *Pfalz*, but dialectically often pronounced *Falz*.

THE DOUBLE CONSONANTS, *x*, *z*.

32. X. *X* is always equivalent to *cs*, never to *gz*, as it sometimes is in English. This conclusion follows from the voiceless character of Latin *s*, before which a guttural was necessarily assimilated.

33. Z. The value of *z* is somewhat uncertain. The character is confined exclusively to foreign words, chiefly Greek. Though introduced in the first Latin alphabet, it was early dropped (see § 1. 3), its place being taken by *g*. Long afterwards, — apparently about Cicero's time, — it was again introduced for the more accurate transcription of ζ in words borrowed from the Greek. Prior to this time the Latin had transliterated Greek ζ when initial by *s*, and by *ss* in the interior of words, *e.g.* *sōna* (= ζώνη); *atticissō* (= ἀττικίζω). But with the increasing use of Greek at Rome, a more accurate designation of the sound was felt to be necessary, and accordingly the Greek character itself was introduced. Cf. the care exercised at the same period in designating the aspirate in Greek loan-words.

The pronunciation of *z* in Latin must have followed the pronunciation of Greek ζ for the corresponding period. As regards ζ, while it almost certainly had the sound of *z*^ʰ in the Attic of the fifth century B.C., it is likely that by the beginning of the Macedonian period (approximately 300 B.C.) it had become a simple *z* sound (as in English *gaze*), — though probably somewhat prolonged; for it still 'made position,' as though a double consonant. See Blass, *Pronunciation of Greek*, § 31. The same sound probably attached to Roman *z*. For while certain Roman grammarians explain *z* as equivalent to *sd* or *ds*, their statements are probably but the echo of Greek discussions concerning the sound of *z*. It is worthy of note that one Roman grammarian, Velius Longus, a

most competent witness on phonetic questions, specifically denies that *z* is the equivalent of *sd*, and asserts that it is not a double consonant at all, but has the same quality throughout. (Keil, vii. 50. 9.)

DOUBLED CONSONANTS.

34. When the mutes were doubled (*tt, dd; pp, bb; cc, gg*) there were two distinct consonant articulations. Thus in *mittō*, the first *t* was uttered with a definite muscular effort, involving closure of the organs in the *t*-position; then after a momentary pause a second muscular effort followed, with the organs in the same position. See Seelmann, *Aussprache des Latein*, p. 110. Such doubled consonants do not occur in English. We often write *tt, pp, cc, etc.*, but pronounce only a single *t, p, or c, e.g. ut(t)er, up(p)er, etc.* But in Italian and several other modern languages these doubled consonants are frequent, *e.g. Italian bocca, conobbi, cappello.*

The same double articulation is probably to be assumed in case of doubled liquids (*ll, rr*), doubled nasals (*mm, nn*), and doubled spirants (*ff, ss*), though it is possible that in some words where these combinations followed a long vowel they merely indicated a liquid or spirant that was prolonged in utterance, as, for example, *vāllum, ūllus.*

DIVISION OF WORDS INTO SYLLABLES.

35. The principles given in the *Grammar* (§ 4) for the division of words into syllables are the traditional ones; yet the validity of some of them is open to question, — particularly of the principle embodied under § 4. 3: 'Such combinations of consonants as can begin a word are joined to the following vowel.' In support of this principle may be cited the testimony of the Roman grammarians, who practically agree in prescribing the rule given above, and some of whom even include such combinations of

consonants as can begin a word in Greek, *e.g.* *pt*, *ct*, *bd*. See for instance Caesellius, cited by Cassiodorus (Keil, vii. 205. 1); Terentianus Maurus (Keil, vi. 351. 879).

On the other hand it may be urged that the principle laid down by the Roman grammarians is merely an echo of rules maintained by Greek scholars for their own language. *Cf.*, for example, Bekker, *Anecdota Graeca*, iii. p. 1127; Theodosius (ed. Götting), p. 63, where the same laws for syllable division may be found. We have already seen indications of such irresponsible borrowing in the case of the testimony of the grammarians concerning the pronunciation of *z*. See § 33. Moreover, we find Quintilian (i. 7. 9) advocating an etymological principle of division, *e.g.* *haru-spex*, *abs-temius*.

When we come to examine the mode of dividing words followed in our best Latin inscriptions, the evidence is strikingly at variance with the traditional rule which prescribes joining as many consonants as possible with the following vowel. In about 80 per cent of all the cases in which words are divided at the end of a line, one of the consonants is joined with the preceding vowel, — evidently a systematic violation of the grammarians' rule. Even greater is the proportion of violations of the rule in those words which exhibit interpunctuation in inscriptions, *i.e.* separation of the syllables by dots, *e.g.* EGES·TAS; VIC·TO·RI; OP·TA·TVS. For a full presentation of the epigraphic evidence bearing upon this point, see Dennison, in *Classical Philology*, Vol. I. p. 47 f.

There is also evidence of a phonetic nature bearing upon this question. A syllable containing a short vowel followed by two consonants is phonetically long, as recognized by all our grammars and demonstrated in every line of Latin poetry. But open syllables containing a short vowel are short; and in such words as *doctus*, *minister*, *hospes*, if we divide according to the grammarians' rule (*i.e.* *dō-ctus*, *mini-ster*, *hō-spes*), we get pre-

cisely these open syllables containing a short vowel, *i.e.* short syllables. For with this utterance, there is no more reason why the *dō-* of *dō-ctus* should be long than the *dō-* of *dō-cet*; or the *nĩ-* of *minĩ-ster* any more than the *nĩ-* of *minĩ-mus*. In both cases we have open syllables containing a short vowel, *i.e.* short syllables. Hence it is clear that the Romans in actual utterance must have joined one of a group of consonants to a preceding short vowel. This gives a closed syllable (*i.e.* a syllable ending in a consonant), and it is a fundamental phonetic principle that a closed syllable is long. These principles also throw light on the nature of common syllables. A common syllable is one containing a short vowel followed by a mute with *l* or *r* (*pl, cl, tl, pr, cr, tr; etc.*). In verse such a syllable may be either long or short. But naturally a difference of pronunciation must have accompanied this variation of quantity. In a word like *pătrem*, for example, when the first syllable was used as long the *t* was joined with the *a* (*păt-rem*), thus closing the syllable; but when the first syllable was used as short, the *t* was joined with the *r* (*pă-trem*), thus leaving the syllable open.

Evidence contradicting the grammarians' rule is found also in the division of words in examples cited by ancient writers on Latin prosody. When these writers separate a verse of poetry into its component feet, they divide the syllables not according to the grammarians' rule, but according to the principle explained above as demanded by phonetic considerations, *e.g.* :

Conticu ere om nes in tenti que ora te nebant
 Turnus ut infrac tos ad verso Marte La tinos
 Ut belli signum Lau renti Turnus ab arce.

See especially Hale, *Harvard Studies*, Vol. VII. p. 268.

The rule of the grammarians, therefore, seems thoroughly discredited. It is contradicted by the testimony of inscriptions, by considerations of phonetics, and by syllabification followed

in metrical illustrations by the writers on prosody. It should accordingly be rejected, as resting not upon competent phonetic observation of contemporary speech, but rather upon the traditional rules which the Greek grammarians set up for their own language, — rules, by the way, which were no more phonetically accurate for Greek than for Latin. Very likely their phonetic accuracy was never claimed by the ancients themselves. It is more probable that they were simply copyists' rules intended to furnish a convenient standard for practical use.

The phonetic principle for the division of syllables where two or more consonants are involved may be formulated as follows : In case of such combinations of consonants, a mute + *l* or *r* is joined to the following vowel, except when a long syllable is needed, in which latter case the mute is joined to the preceding vowel. Thus regularly *pa-tris*, *volu-cris*, *a-grī*; but *ag-rī*, when in poetry the first syllable is used as long. In prepositional compounds, also, whose first member ends in a mute, and whose second begins with *l* or *r*, the mute is always joined to the preceding vowel, *i.e.* the preceding syllable is always long, *e.g.* *ab-lātus*, *ab-rumpō*. In all other combinations of consonants, the first consonant is joined to the preceding vowel, as *al-tus*, *an-go*, *hos-pes*, *dic-tus*, *minis-trī*, *mag-nus*, *mōn-strum*. This principle obviously demands that *x* should be divided in pronunciation, as was undoubtedly the case. Thus *āxis* must have been pronounced *ac-sis*, *lā-xus* as *lac-sus*; so, also, very likely after a long vowel, *vīc-sī* (*vīxī*); *rēc-sī* (*rēxī*), though it is obvious that after a long vowel such division is not phonetically necessary.

As regards the rule of the ancient grammarians laid down in the *Grammar* (§ 4. 4), to the effect that prepositional compounds are separated into their component parts, the phonetic evidence seems altogether against this when the preposition ends in a single consonant and the next letter of the compound is a vowel. The division *per-eō*, *inter-eā* gives us a closed (*i.e.* long) syllable;

whence it would appear that the actual division in such cases was *pe-reō*, *inte-reā*, exactly as in *ge-rō*, *te-rō*; *i.e.* compounds of this kind at least were divided precisely like other words.

Rule 4 in § 4 of the *Grammar* may therefore, for all scientific purposes, be abandoned, since, except as already indicated, compounds call for the application of no special principles.

CHAPTER III.

HIDDEN QUANTITY.

36. A hidden quantity is the quantity of a vowel before two consonants. Such a quantity is called hidden, as distinguished from the quantity of a vowel before a single consonant, where the metrical employment of the word at once indicates whether the vowel is long or short. The quantity of a vowel before a mute with *l* or *r* is hidden unless the syllable containing it appear in verse used as short.

The methods of determining hidden quantity are the following:¹

1. *Express testimony of ancient Roman writers, e.g. Cicero, Orator*, 48. 159, where the principle for the length of vowels before *nf*, *ns* is laid down (see § 37); Aulus Gellius, *Noctes Atticae*, ii. 17; iv. 17; ix. 6; xii. 3. Nearly every Roman grammarian furnishes some little testimony of this kind, and though some of them belong to a comparatively late period, their evidence often preserves the tradition of earlier usage, and hence is entitled to weight.

2. *The versification of the earlier Roman dramatists*, especially Plautus and Terence, with whom a mute before a liquid never lengthens a syllable whose vowel is short. Hence, before a mute followed by a liquid, the quantity of the vowel always appears in these writers, being the same as the quantity of the syllable, just as in case of a vowel followed by a single consonant.

Furthermore, Plautus and Terence not infrequently employ as short many syllables which in classical poetry would be invariably

¹ The material here presented is based chiefly upon Marx's *Hilfsbüchlein*, cited below, p. 39.

long by position. Examples are the following: *juvēntūs*, Plautus, *Mostellaria* 30; *Curculio* 38; *volūntās*, *Trinummus* 1166; *Pseudolus* 537; *Stichus* 59; *volūptās*, *Mostellaria* 249, 294; *Amphitruo* 939, and elsewhere. These cases are to be explained by the fact that the vowel was short and the following consonants failed to 'make position.'

In some instances, it must be confessed, even long vowels are used as short, e.g. *bonīs mīs*, Plautus, *Trinummus* 822, *forīs pultābō*, 868. But these cases are of a peculiar sort and may be explained on metrical grounds, or by the iambic nature of the words, as in the examples cited. Cf. § 87. 3.

3. *Inscriptions*.—Since the middle of the first century B.C. the *apex* (or point) appears added to the vowels *a*, *e*, *o*, *u* to indicate their length. Long *i* was designated originally by *I* (rising above the other letters and hence called *i longa*) and by *ei*; later, *ī* took the *apex*. Examples are TRÁXI, CIL. x. 2311; PRÍSCVS, CIL. xi. 1940; ÓLLA, CIL. vi. 10006; QŪINQVE, CIL. vi. 3539; MĪLLIA, Monumentum Ancyranum, i. 16; FECEI, CIL. i. 551.

Before the employment of the *apex* the length of the vowel in case of *a*, *e*, *u* was indicated by doubling the vowel, e.g. PAASTORES, CIL. i. 551; PEQVLATVV, CIL. i. 202; *o* is never doubled in this manner. This peculiarity belongs to the period from 130 to 70 B.C.

A thoroughly consistent use of these methods of designating the vowel quantities is found, it must be admitted, in but few inscriptions. Of the vowels contained in syllables long by position only a portion are marked, as a rule, in any single inscription. Certain official inscriptions of the late republican and early imperial period form an exception to this, and exhibit very full and reliable markings, e.g. the speech of the Emperor Claudius (Boissieu, *Inscriptions de Lyon*, p. 136) and the Monumentum Ancyranum, containing the *Rēs Gestae Divī Augustī*. This latter, among a great number of correct markings, contains also some false ones, e.g. CLŪPEI, SVMMÁ. Such errors also occur occasionally elsewhere.

4. *Greek transcriptions of Latin words.* — This method is most fruitfully applied in case of the vowels *e* and *o*. The employment of Greek ϵ or η , o or ω makes the quantity of the Latin vowel certain, wherever faith may be reposed in the accuracy of the transcription. Thus we may write *Ēsquiliae* in view of Ἡσकुλίνοσ, Strabo, v. 234, 237; *Vērgilius*, after Οὐεργίλιος; *Vesōntiō*, after Οὐεσοντίων, Dio Cassius, lxviii. 24.

The quantity of *i* may also often be determined by Greek transliterations. Thus $\epsilon\iota$ before two consonants regularly points to Latin \bar{i} , e.g. Βεΐψανιος, CIG. 5709, = *Vīpsānius*; Greek ι points to Latin \check{i} , e.g. Ἰστροσ = *Ister*.

Inscriptions are naturally of much greater weight in such matters than are our texts of the Greek writers. Cf. § 3. c).

5. *The vocalism of the Romance languages.* — These languages, particularly the Spanish and Italian, treated *e*, *i*, *o*, *u* with great regularity according to the natural length of the vowel. It will be remembered that Latin \bar{e} and \bar{o} were close; Latin \check{e} and \check{o} open. Now the Romance languages have not preserved the original *quantity* of Latin vowels; for both the long and the short vowels of the Latin have become half-long in Romance; but they have very faithfully preserved their *quality*. Thus Latin \bar{e} appears as a close *e* in Italian and Spanish; Latin \check{e} as an open *e* or as *ie*. Latin \bar{o} appears as a close *o* in Italian and Spanish; Latin \check{o} as an open *o* or as *uo* (*ue*). Similarly Latin \bar{i} remained *i*, but \check{i} became a close *e*; Latin \bar{u} remained *u*, but \check{u} became close *o*. Examples:

LATIN.	ITALIAN.
<i>mēnsis.</i>	<i>mese</i> (with close <i>e</i>).
<i>honēstus.</i>	<i>onesto</i> (with open <i>e</i>).
<i>mōnstrāre.</i>	<i>mostrare</i> (with close <i>o</i>).
<i>dōctus.</i>	<i>dotto</i> (with open <i>o</i>).
<i>dīxi.</i>	<i>dissi.</i>
<i>dīctus.</i>	<i>detto</i> (with close <i>e</i>).
<i>dūxi.</i>	<i>-dussi.</i>
<i>dūctus.</i>	<i>-dotto</i> (with close <i>o</i>).

The Romance languages, however, authorize conclusions only with reference to the popular language as opposed to that of the better educated classes. In the popular speech the tendency was rather toward the shortening of long vowels than toward the lengthening of short ones. Hence where the Romance languages point to a long vowel in the popular language, it is safe to assume that the vowel was long in the literary language. When, on the other hand, the Romance languages point to a short vowel, this testimony is not necessarily conclusive, particularly if other facts point clearly in the opposite direction.

Again, the Romance languages authorize conclusions only in case of words inherited from the Latin. Many Romance words represent mediaeval borrowing by the learned class, as Italian *rigido*, *cibo*, *metro*, *tenebre*, *pustula*, *lubrico*. All such words retain the Latin vocalism. In some cases it is difficult to decide whether a word has descended by the popular or the learned channel, e.g. *luxus*, *urna*.

With all the assistance furnished by the methods above enumerated, there nevertheless remain some words whose vowel quantity cannot be determined. It is customary to regard all such vowels as short, until they are proved to be long.

The following are the most important works of reference on this subject:

- MARX, *Hilfsbüchlein für die Aussprache Lateinischer Vokale in Positionslangen Silben*. 3d ed. Berlin, 1901. A work valuable for its collection of evidence, but frequently untrustworthy in its conclusions.
- SEELMANN, *Die Aussprache des Latein*. Heilbronn, 1885. p. 69 ff.
- GRÖBER, *Vulgärlateinische Substrata Romanischer Wörter*, a series of articles in Wölfflin's *Archiv für Lateinische Lexikographie*, vols. i-vi.
- KÖRTING, *Lateinisch-Romanisches Wörterbuch*. 2d ed. Paderborn, 1901.
- LINDSAY, *The Latin Language*. Oxford, 1894. p. 133 ff.
- D'OVIDIO, in *Gröber's Grundriss der Romanischen Philologie*. Strassburg, 1888, i. p. 497 ff.
- MEYER-LÜBKE, *Grammatik der Romanischen Sprachen*. Leipzig, 1890.

CHRISTIANSEN, *De Apicibus et I Longis*. Husum, 1889.

ECKINGER, *Orthographie Lateinischer Wörter in Griechischen Inschriften*.
Munich, 1891.

HERAEUS, *Beiträge zur Bestimmung der Quantität in Positionslangen Silben*
in Wölfflin's *Archiv für Lateinische Lexikographie*, Vol. xiv. pp. 393 ff.;
449 ff.

Further literature up to 1901 is cited by Marx, p. xiv f.

GENERAL PRINCIPLES FOR THE DETERMINATION OF HIDDEN QUANTITY.

VOWELS BEFORE *ns*, *nf*.

37. A vowel is always long before *ns* and *nf*, e.g. *cōsul*, *īnfēlix*. This principle rests upon the following evidence :

a) Cicero, *Orator*, 159, expressly states that in compounds of *con* and *in*, the vowel was pronounced long when followed by *f* or *s*.

b) Before *ns* the vowel is often marked in inscriptions with an *apex*, as CIL. xii. 3102 CĒNSOR; CIL. vi. 1527 d. 64 CŌNSTO; CIL. xi. 1118 MÉNSVM; the *apex* occurs less frequently before *nf*, e.g. CIL. xi. 1118 CŌNFICIVNT. But *i longa* occurs repeatedly before both *ns* and *nf*, e.g. CIL. iii. 67 INSPEXI; vi. 647 INSTRVXERVNT; CIL. ii. 4510 INFERIORIS; CIL. xiv. 1738 INFANTI; CIL. x. 4294 INFERRI.

c) Greek transliterations of Latin words often indicate a long vowel before *ns*, as Κρήσκηνς (= *Crēscēns*); Προύδηνς (= *Prūdēns*).

VOWELS BEFORE *gn*, *gm*.

38. Until recently the doctrine was current that all vowels are long in Latin before *gn*. In the *Appendix* to my *Latin Grammar*, I showed that this general principle was altogether too sweeping and that at most we could go no farther than to recognize with Priscian the length of the vowel before the suffixes *-gnus*, *-gna*, *-gnum* and in such other individual words as may be sup-

ported by specific evidence. Admitting the validity of Priscian's testimony for the length of the vowel before -gnus, -gna, -gnum, I showed that there was certainly no evidence to support the doctrine of Marx (see his *Hülfsbüchlein*, p. 1) that the vowel is long before gn in *gignō*, *agnōscō*, *agnātus*, *cognōscō*, *cognātus*, *ignārus*, *ignāvus*, *ignōrō*, *ignōscō*, etc. Marx holds that the vowel in these latter forms was long as the result of compensatory lengthening, *ignārus* being for **in-gnārus*, *cognōscō* for **con-gnōscō*. But no such theory of compensatory lengthening is tenable. Marx's appeal (p. 1) to the fact that Plautus always uses the syllable before gn as long, is of no weight, since we should naturally expect gn to 'make position' in Latin just as γν regularly does in Greek.

But there has been a growing tendency in recent years to reject even Priscian's testimony in favor of the length of the vowel before the suffixes -gnus, -gna, -gnum. The passage is found in Keil, Vol. ii. p. 82: "*Gnus*" quoque vel "*gna*" vel "*gnum*" terminantia longam habent vocalem paenultimam, ut "*rēgnum*," "*stāgnum*," "*benīgnus*," "*malīgnus*," "*abiēgnus*," "*prīvīgnus*," "*Pelīgnus*." Some scholars, as Havet, regard this statement as an interpolation. Others, while admitting the genuineness of the passage, impugn its correctness. Buck (*Classical Review*, Vol. xv. p. 311, ff.) has discussed the question here at issue with great thoroughness and candor, and urges (p. 312) against the long vowel before -gnus, -gna, -gnum: "(1) the fact that, except in words with an original long vowel, the Romance languages point to a short vowel before gn; (2) the fact that the Celtic and Germanic words borrowed from Latin *signum* also point to a short vowel; (3) the total absence on inscriptions of the *apex* or *I longa* in the case of the great majority of words with gn, some of them, like *magnus*, of so frequent occurrence that this absence can hardly be accidental; (4) the citation of *dignitas* as an anapaest by Diomedes (Keil, Vol. i. p. 470), who has in mind only vowel

quantity, not syllabic quantity." Nevertheless certain words of this class seem occasionally (in special localities, perhaps, or in special social strata) to have had a long vowel before *gn*, as seen in *SIGNUM*, CIL. vi. 10234; *SEIGNVM*, xiv. 4270; *SIGNIFICABO*, vi. 16664; *DIGNI*, x. 5676; *PRIVIGNO*, vi. 3541; *IGNIS*, xi. 826. But these Buck regards as abnormal and exceptional pronunciations. Buck's argument is a very strong one, and his conclusions deserve at least provisional acceptance. It should be noted, however, that three words, *rēgnum*, *stāgnum*, *abiēgnus*, being derived from stems with a long vowel, were legitimately entitled to their long quantity and always retained it.

39. Before *gm* the vowel is long in *pīgmentum* (see CIL. viii. 1344, *PIGMEN*[T]) and in *sēgmentum* (cf. Greek *σηγμέντα*), but there is no evidence warranting the formulation of a broad rule embracing all vowels before *gm*, as is done by Marx (p. 1). Marx appeals to the analogy of *gn* in support of his attitude; but apart from the dangers of this kind of reasoning, we have already seen that the case for vowel length before *gn* is of the weakest possible kind, so that, even if we admit the validity of the analogy, there is nothing to indicate regular vowel length before *gm*.

VOWELS BEFORE *nt*, *nd*, *ss*.

40. 1. All vowels are regularly short before *nt* and *nd*, e.g. *amandus*, *montis*, *amant*, *monent*.

2. Exceptions:

a) Before *nt* the vowel is long in

α) *quīntus*.

β) the following contracted words: *cōntiō* (for *coventiō*), *jēntāculum* (for **jējūntāculū*), *jēntātiō* (for **jējūntātiō*), *nūntius* (for **noventius*).

γ) Greek proper names in *-ūs*, Gen. *-ūntis*, e.g. *Selīnūs*, *Selīnūntis* (Greek, Σελινούντος).

δ) Greek proper names in -ōn, Gen. -ōntis, e.g. *Xenophōn*, *Xenophōntis* (Greek, *Ξενοφώντας*).

δ) Before *nd* the vowel is long in

α) the following contracts and compounds: *prēndō* (for *prehendō*), *nōndum* (*nōn* + *dum*), *vēndō* (*vēnumdō*), *nūndinus* (*novem diēs*), *quīndecim* (*quīnque*), *ūndecim* (*ūnus*).

β) some Greek names, e.g. *Charōndās*, *Epamīnōndās* (-ώνδας).

3. The evidence for the short vowel before *nt* lies in the fact that, while in the Nominatives of such words as *clēmēns*, *crēsēns*, *cliēns*, *fōns*, *gēns*, *parēns*, *pōns*, *praesēns*, the long quantity of the vowel is assured either by the presence of the *apex*, or by a long vowel in Greek transcriptions, in the oblique cases the *apex* is lacking, and in Greek transcriptions the vowel is short, e.g. *Κλήμης* (i.e. *Κλήμηνς*), CIA. iii. 1094, but *Κλήμεντος*, CIG. 3757; *Κλήμεντι*, CIG. Addenda, 1829 c.; *CRĒSCĒNS*, CIL. xii. 4030, but *CRĒSCENTI*, CIL. vi. 9059; *Κρήσκης*, CIG. 6012, c.; but *Κρήσκεντι*, CIG. Addenda, 1994, f.; *Πραίσης* (i.e. *Πραίσηνς*), CIA. iii. 1147, but *Πραίσειντι*, *Πραίσειντα*, CIG. 3175, 3991.

Even where a vowel is naturally long, it sometimes becomes shortened before *nt*, e.g. in *linteum* from *līnum*; cf. Greek *λέντιον*, CIG. 8695.

For the vowel before *nd* the evidence is not so full. We find the Greek transcriptions *Καλένδαις*, Lydus, *de Mens.* iv. 53, 57; *Φονδάνιος* (i.e. *Fundānius*), *Bulletin de Correspondance Hellénique*, ix. p. 439.

4. Vowels are also regularly short before *ss*, according to the express testimony of Quintilian, i. 7. 20. But see § 47. 1.

PONTEM, FONTEM, MONTEM, FRONTEM, FRONDEM.

41. A slight uncertainty exists as to the quantity of the vowel before *nt* in the oblique cases of *fōns*, *mōns*, *pōns*, *frōns*

(*frontis*); and before *nd* in *frōns* (*frondis*). Three sets of facts are to be considered:

a) The analogy of other words in *-ns* (Gen. *-ntis*). Such words, so far as they are genuine Latin words, have, without exception, a short vowel before *nt* in the oblique cases. See § 40.

b) The testimony of the Romance languages. This is as follows for the different words under discussion:

fōns. The Romance languages seem to point to an antecedent *fōntis*, *fōnti*, etc. Thus the Italian *fonte* has close *o*; so the Provençal *fon*. Spanish alone with its *fuelle* points to *fōntem* (Gröber, *Archiv*, ii. p. 426; Körting, *Lat.-Romanisches Wörterbuch*).

frōns (-ndis). The Romance languages all agree in pointing to *frōndem* (Gröber, *Archiv*, ii. p. 426; Körting, *Wörterbuch*).

frōns (-ntis). Provençal *fron* and Italian *fronte*, with close *o*, point to *frōntem*. So the other Romance languages, except Spanish, which has *fuente*, pointing to *frōntem*. (Gröber, *Archiv*, ii. p. 426; Körting, *Wörterbuch*.)

mōns. The Romance languages point unanimously to *mōntem* (Gröber, *Archiv*, ii. p. 426; Körting, *Wörterbuch*).

pōns. Provençal *pon* and Italian *ponte* with close *o* point to *pōntem*; so the other Romance languages, except Spanish, which has *puente*, pointing to *pōntem*.

If mere numerical preponderance were decisive, we might at once conclude that all these words went back to Latin forms with *ō* in the oblique cases, and might explain Spanish *fuente*, *fuelle*, *puente* (which should be *fronte*, *fonte*, *ponte*, to represent Latin *ō*) as exceptions to the prevailing law of development. A glance at certain facts, however, in Italian and Provençal, suggests another conclusion. We find it to be a regular law in these languages that an original open Latin *o* (i.e. short *o*, see § 36. 5), when followed by *m*, *n*, or *l*, + another consonant, becomes close. Thus Latin *tōndet* with open *o*, becomes Italian

tonde, with close *o*. Similarly *respöndet* becomes *risponde*; *rhömbus* becomes *rombo*; *pöl(y)pus* becomes *polpo*, all with close *o*. Just what has brought about this change is not certain. D'Ovidio in Gröber's *Grundriss der Romanischen Philologie*, i. p. 522, thinks it was the analogy of words in *on* + consonant, *om* + consonant, and *ol* + consonant, in which close *o* had developed regularly from an earlier *ũ* (see § 36. 5), e.g. *rompe* (= *rumpi*); *onda* (= *unda*); *dolce* (= *dulcis*). In accordance with this principle, whose operation is certain, Latin *föntem*, *fröndem*, *fröntem*, *möntem*, *pöntem*, would (assuming these to be the original forms) regularly become in Italian: *fonte*, *fronde*, *fronte*, *monte*, *ponte*, with close *o*, exactly as we find them. The admission of a long *o* in the oblique cases of these Latin words is, therefore, not necessary in order to account for Italian and Provençal close *o* in their Romance descendants. In fact, when we consider Spanish *fuenta*, *fruenta*, *puente*, all of which point to Latin *ō*, it seems more reasonable to regard Spanish *monte* and *fronde* (which point to *ō*) as the exceptions. Gröber, who (*Archiv*, vi. p. 389) expresses himself in favor of assuming an original *föntem*, etc., in these words, suggests that Spanish *monte*, *fronde*, are loan-words, while *fuenta*, *fruenta*, *puente* represent an original inheritance.

Briefly, then, a fair interpretation of the evidence of the Romance languages seems to warrant the belief that the oblique cases of the words under discussion came into the Romance languages from the Latin with a (short) open *o*; that in Italian and Provençal this open *o* subsequently became close in accordance with a regular law of wide operation. Spanish regularly developed the open *o* to *ue* in those words which it inherited from Latin (viz. in *fuenta*, *fruenta*, *puente*); while Spanish *monte* and *fronde* are probably loan-words from Italian.

c) The third bit of evidence comes from Greek transliterations of Latin words as found in Greek inscriptions and Greek authors.

Thus we find Φοντήιος (= *Fōnteius*) in Plutarch and Appian; also in an inscription, CIG. iii. 5837, b (59 A.D.); Φροντήιος, CIA. iii. 1154 (between 150 and 200 A.D.); Φροντήιος, CIA. iii. 1177 (about 220 A.D.); Φρόντων, CIA. iii. 1113, 21, 26 (before 161 A.D.), and in texts; all of which point to Latin *Frōntō*, and *Frōntinus*, and indirectly to *frōnt-em*. Latin *Montānus* appears as Μοντανός, CIG. Addenda, 4805 b; and we find τριμόντιον, Ptol. iii. 11, 12, *et passim*; πόντεμ (= Latin *pōntem*) is the text in Plutarch, *Numa*, 9; ποντίφιξ (= *pōntifex*), in Dionysius, Dio Cassius, and Zosimus; ποντίφεξ, in Lydus, *de Mens.* iii. 21; ποντίφικες, in Plutarch, *Numa*, 9; and ποντίφικα, in an inscription in Kaibel's *Sylloge Epigrammatum*, Addenda, 888 a. The Greek never shows an ω in any of these words, either in inscriptions or in Mss. The evidence furnished by that language therefore is unanimous in favor of *ō* for the Latin. Nor can recognition be refused the inscriptions above cited on the ground that they are late. As the annexed dates show, they all belong to the good period of the language.

We thus have the strongest possible grounds for writing *fōntis*, *frōndis*, *etc.* The analogy of other words in *-ns* (Gen. *-ntis*) favors this view; the Romance languages favor it, and the testimony of Latin words in Greek dress, as exhibited both in texts and in inscriptions, favors it. In fact, the evidence is complete.

The isolated apex in FRÓNT (for FRÓNTEM, as the context shows), CIL. v. 2915, is certainly a mere blunder of the stone-cutter, as is often the case in other words, even in carefully cut inscriptions (see § 36. 3). Christiansen, *De Apicibus et I Longis*, p. 57, cites thirteen such instances for vowels before *nt*.

HIDDEN QUANTITY IN DECLENSION.

42. 1. It is maintained by some scholars (*e g.* Marx, *Hilfsbüchlein*, p. 2; Lane, *Harvard Studies*, i. p. 89) that the ending *-um* in the Genitive Plural of nouns of the First and Second

Declensions has \bar{u} in such forms as *Aeneadum*, *deum*, *nummum*; also in *nostrum* and *vestrum*. The facts in evidence are the following:

a) On early Latin coins prior to the First Punic War, we find the final *m* of many Genitives Plural omitted, e.g. ROMANO, CORANO. Coins of the same date regularly retain final *m* of the Nominative or Accusative Singular, e.g. VOLCANOM, PROPOM (= *probum*). This has led Mommsen (CIL. i. p. 9) to infer that there was a difference in the quantity of the *o* in the two instances. As the *o* of the Nominative and Accusative Singular was short, Mommsen thought that in the Genitive Plural it must be long. But the material with which Mommsen deals is extremely scanty. Genitive Plural forms occur in some number; but only a few Nominative and Accusative forms are found, viz. VOLCANOM, PROPOM. Again, ROMANOM (CIL. i. 1) and AESERNINOM (i. 20) show that Genitives sometimes retained the *m*. Mommsen attempts to solve this difficulty by taking ROMANOM and AESERNINOM as the Nominative Singular Neuter of the Adjective; but that is awkward. The natural inference must be that there was no system in the omission of final *m* on these coins. The coins represent no dialect; in fact they represent widely separated localities; hence it is no wonder if the final *m* (always weak) was sometimes written, sometimes omitted. In the Scipio inscriptions, the oldest of which may date within a quarter of a century of these coins, we find final *m* freely omitted in the Accusative and Nominative Singular just as elsewhere. It is, therefore, extremely unlikely that Mommsen's hypothesis concerning the coins is correct.

b) An inscription of Nuceria (CIL. x. 1081) has DVVMVIRATVS, which Schmitz (*Rheinisches Museum*, x. 110) and Lane (*Harvard Studies*, i. p. 89) regard as evidence that the *u* of *duum* (Gen. Pl. of *duo*) was long. But even conceding the correctness of the *apex* in this isolated instance, it remains to be shown that the

duum- of *duumvir* and *duumvirātus* is in origin a Genitive. Such an etymology would involve the assumption that the *duum-* of the Genitive Plural, *duumvirum*, became transferred to the other cases, replacing *duo* in earlier *duovirī*, etc. Such an assumption is extremely improbable. It is much more likely that *duumvir* and *triumvir* are formed after the analogy of *centumvir*. In the singular especially such forms as *duovir*, *trēs vir* would have been extremely awkward, and it seems probable that the singular *duumvir*, *triumvir* were for that reason historically anterior to *duumvirī*, *triumvirī*. The *apex* in the Nucerian inscription, if this etymology be correct, would then be simply a blunder of the engraver, as is altogether probable. The evidence in favor of *-ūm* in these Genitives must, therefore, be regarded as of no weight, especially in view of the regular shortening of vowels before final *-m* in Latin. Certainly if *-ūm* did by any possibility exist in the days of Augustus, the *u* had become shortened by 90 A.D. For Quintilian (i. 6. 18), as noted by Lane (p. 90), shows that to his ear *nummum*, Genitive Plural, was nowise different from *nummum*, Accusative Singular.

2. Words in *-er* of the Second Declension, and words of the Third Declension in *-er* and *-x*, have in oblique cases the same quantity of the vowel as in the Nominative, e.g. *āger*, *āgrī*; *frāter*, *frātris*; *ācer*, *ācris*; *pāx*, *pācis*; *tenāx*, *tenācis*; *fāx*, *fācis*; *rēx*, *rēgis*; *nīx*, *nīvis*; *cornīx*, *cornīcis*; *calīx*, *calīcis*; *fel*, *fellis*; *ōs*, *ōssis*; *plēbs*, *plēbis*. Thus sometimes the Nominative gives the clue to the hidden quantity in the oblique cases (as *āger*, *āgrī*); sometimes the oblique cases give the clue to the hidden quantity of the Nominative (as *cornīcis*, *cornīx*).

3. Words of the Third Declension ending in *-ns* (Gen. *-ntis*) uniformly have a short vowel in the oblique cases, as already explained in § 40. 3. Greek words in *-ās* (Gen. *-antis*), e.g. *Aiās*, *Aiantis*; *gigās*, *gigantis*, have the same quantity as in the original (*Aiās*; *Aiāvros*; *γigās*, *γigāvros*). So, also, contracted

Greek names of cities in -οῦς, -οῦντος, *e.g.* *Selīnūs*, *Selīnūntis*; and proper names in -ῶν, -ῶντος, *e.g.* *Xenophōn*, *Xenophōntis*. *Acheron* (not a contract form) has *Acherūntis*.

4. In all words of the Third Declension ending in two or more consonants (excepting -*ns* and -*x* preceded by a vowel), the hidden vowel before the ending is short, *e.g.* *ŭrbs*, *sōrs*, *ārx*. Exceptions to this principle are *plēbs* and compounds of *ŭncia* ending in -*ŭnx*, *e.g.* *deŭnx*, *deŭncis*, *quīncŭnx*, *quīncŭncis*. Before -*x* the vowel is sometimes long, sometimes short, as already explained in 2, above.

COMPARISON OF ADJECTIVES.

43. In the terminations -*issimus*, -*errimus*, -*illimus*, the hidden vowel is short, *e.g.* *carīssimus*, *acērrimus*, *facīllimus*. Apparent traces of a long *i* in the termination -*issimus* are found in inscriptional forms with *i longa*. The word of most frequent occurrence is *PISSIMUS*; besides this we find a few other words, *e.g.* *CARISSIMO*, CIL. vi. 5325; *DVLCISSIMO*, vi. 16926; *FORTISSIMO*, vi. 1132. But many of these inscriptions belong to the last centuries of the Empire, when the use of *i longa* had become an extremely untrustworthy guide, as may be seen by palpable errors. As regards the frequent occurrence of *PISSIMAE*, *PISSIMO*, these may perhaps be explained on the theory that *i longa* was here used to indicate not merely *i*, but also the *j* which developed in pronunciation between the two *i*'s, i.e. *pijissimo*. Cf. the similar use of *i longa* in words like *POMPEIUS*, CIL. ix. 3748. At all events, in the absence of the *apex* in these superlatives, and in view of the absolute silence of the grammarians, it seems unwise to attach great weight to the occurrence of the *i longa* alone. Against *ī*, Lindsay (*Latin Language*, p. 405) urges the occurrence of late spellings like *MERENTESSEMO*, *KARESSEMO*, CIL. ii. 2997. Cf. § 6. 1.

NUMERALS.

44. As separate words are to be noted :

- a) *quattuor*, but *quārtus* (see § 53 under *arca*).
- b) *quīnque* and its derivatives, all of which have *ī*, as *quīndecim*, *quīntus*, *quīngentī*, *quīnquāgintā*.
- c) the derivatives of *ūnus* : *ūndecim*, *ūndēviginti*, etc.
- d) *mīlle*, *mīllia*, and *mīllesimus*.

PRONOUNS.

- 45. 1. *Nōs*, *vōs* ; but *nōster*, *vēster* ; *nostrī*, *vestrī*, etc.
- 2. *Hunc* and *hanc* have a short vowel.
- 3. *Ille*, *ipse*, *iste* have *ī*.
- 4. The suffix *-cunque* has *ū*.
- 5. Compounds retain the quantity of the elements of which they are compounded, as *quīsquis*, *cūjūsq̄ue*.

CONJUGATION.

ROOT FORMS.

46. 1. Presents formed by means of the infix *n* have a short vowel, e.g. *fūndō* (root *fud-*) ; *frāngō* (root *frag-*) ; *jūngō* (root *jug-*). Before a labial, *n* becomes *m*, e.g. *rumpō* (root *rup-*) ; *lambō* (root *lab-*). Care should be taken not to confuse derivative and contract Presents like *vēndō*, *prēndō*, with genuine nasal formations.

2. In most Presents the hidden vowel is short, e.g. *nectō*, *serpō*, *vertō*. But the following exceptions are to be noted :

- a) First conjugation : *jūrgō* (for *jūrigō*), *nārrō*, *ōrnō*, *pūrgō*, *trāctō*.
- b) Second Conjugation : *ārdeō*.
- c) Third Conjugation : all verbs in *-scō* (*r*), except *compescō*, *discō*, *poscō*, *vescor*.
- d) Fourth Conjugation : *nūtriō*, *ōrdior*.

3. The quantity of the vowel in the Present regularly remains unchanged (when it becomes hidden) throughout the entire conjugation of the verb, *e.g.* :

<i>ardeō</i>	<i>ardēre</i>	<i>arsī</i>	<i>arsūrus</i>
<i>gerō</i>	<i>gerere</i>	<i>gessī</i>	<i>gestus</i>
<i>scribō</i>	<i>scribere</i>	<i>scripsī</i>	<i>scriptus</i>
<i>vivō</i>	<i>vivere</i>	<i>vixī</i>	<i>victūrus</i>
<i>figō</i>	<i>figere</i>	<i>fixī</i>	<i>fixus</i>

Thus inscriptions give *FIXA*, *SCRIPTVM*, *CONSCREIPTVM*, *VIXIT*, *VEIXIT*.

But the following exceptions to this general principle are to be noted :

a)	<i>dīcō</i>	<i>dīcere</i>	<i>dixī</i>	<i>dīctus</i>
	<i>dūcō</i>	<i>dūcere</i>	<i>dūxī</i>	<i>dūctus</i>
	<i>cēdō</i>	<i>cēdere</i>	<i>cēssī</i>	<i>cēssūrus</i>

The short vowel of the Perfect Participles *dīctus* and *dūctus* is assured by the statement of Aulus Gellius (*Noctes Atticae*, ix. 6) and by the testimony of the Romance languages. (See § 52. *s.vv.*)

b) The short vowel of the Present is lengthened in the Perfect Indicative and Perfect Participle, if hidden, in the following verbs :

<i>agō</i>	<i>agere</i>	<i>ēgī</i>	<i>āctus</i>
<i>cingō</i>	<i>cingere</i>	<i>cīnxī</i>	<i>cīnctus</i>
<i>dēlinquō</i>	<i>dēlinquere</i>	<i>dēlīquī</i>	<i>dēlīctus</i>
<i>distinguō</i>	<i>distinguere</i>	<i>distīnxī</i>	<i>distīnctus</i>
<i>emō</i>	<i>emere</i>	<i>ēmī</i>	<i>ēmplus</i>
<i>exstinguō</i>	<i>exstinguere</i>	<i>exstīnxī</i>	<i>exstīnctus</i>
<i>figō</i>	<i>figere</i>	<i>fīnxī</i>	<i>fīctus</i>
<i>frangō</i>	<i>frangere</i>	<i>frēgī</i>	<i>frāctus</i>
<i>fungor</i>	<i>fungī</i>	<i>fūnctus sum</i>	—
<i>jungō</i>	<i>jungere</i>	<i>jūnxī</i>	<i>jūnctus</i>
<i>legō</i>	<i>legere</i>	<i>lēgī</i>	<i>lēctus</i>
<i>pangō</i>	<i>pangere</i>	<i>pēpigī</i>	<i>pāctus</i>
<i>pingō</i>	<i>pingere</i>	<i>pīnxī</i>	<i>pīctus</i>

<i>pungō</i>	<i>pungere</i>	<i>pupugī</i>	<i>pūctus</i>
<i>regō</i>	<i>regere</i>	<i>rēxī</i>	<i>rēctus</i>
<i>relinquō</i>	<i>relinquere</i>	<i>reliquī</i>	<i>relictus</i>
<i>sanciō</i>	<i>sancire</i>	<i>sānxī</i>	<i>sāctus</i>
<i>struō</i>	<i>struere</i>	<i>strūxī</i>	<i>strūctus</i>
<i>tangō</i>	<i>tangere</i>	<i>tetigī</i>	<i>tāctus</i>
<i>tegō</i>	<i>tegere</i>	<i>tēxī</i>	<i>tēctus</i>
<i>tinguō</i>	<i>tinguere</i>	<i>tinxī</i>	<i>tinctus</i>
<i>trahō</i>	<i>trahere</i>	<i>trāxī</i>	<i>trāctus</i>
<i>ungō</i>	<i>ungere</i>	<i>ūnxī</i>	<i>ūctus</i>

So also in compounds and derivatives of these verbs.

4. The evidence for the long vowel in the Perfect Participles of the foregoing list is found :

a) In the statements of Gellius, who testifies (*Noctes Atticae*, ix. 6) to the quantity of the vowels of *āctus*, *lēctus*, *ūctus*, and in xii. 3. 4 to that of *strūctus*.

b) In the testimony of inscriptions, which show the following : *ĀCTIS* CIL. vi. 1377 ; *REDĀCTA* vi. 701 ; *EXĀCTVS* Boissieu, *Inscriptions de Lyon*, p. 136 ; *CINCTVS* CIL. x. 4104 ; *DĒFVNCTIS* CIL. v. 1326 ; *DĪLĒCTVS* vi. 6319 ; *LĒCTVS* xi. 1826 ; *EXSTINCTOS* vi. 25617 ; *INFRĀCTĀ* ix. 60 ; *IVNCTA* x. 1888 ; *SEIVNCTVM* vi. 1527 e. 38 ; *RĒCTE* xii. 2494 ; *TĒCTOR* vi. 5205 ; *COĒMTO Monumentum Ancyranum* iii. 11 ; *TRĀ[CTA* (not certain) CIL. vi. 1527 e. 14 ; *SĀNCTA* v. 2681 ; Oscan *SAA(N)HTOM* (= *sāctom*).

c) In the retention of *a* in compounds of *actus*, *tactus*, *fractus*, *pactus*, *tractus* (e.g. *coactus*, *attactus*, *refractus*, etc.), which shows that the *a* was long; short *a* would have become *e* in this situation, as for example in *cōnfectus* for an original **cōnfāctus*; *acceptus* for an original **accāptus*; *ēreptus* for **ērāptus*.

d) For *cīctus*, *delīctus*, *distīctus*, *exstīctus*, *fīctus*, *pīctus*, *pūctus*, *relictus*, *tīctus*, the long vowel is assured by the evidence of the Romance, e.g. Italian *cinto*, *delitto*, *fitto*, *relitto*, *tinto*.

5. The evidence for the quantity of the vowel in the Perfects of the foregoing list is found :

a) In inscriptional markings, as CONIVNXIT (Wilmanns, *Inscript. Latinae* 104); TEXIT (CIL. x. 1793); REXIT (CIL. v. 875); TRAXI (CIL. x. 2311, 18).

b) In Priscian's statement (Keil, ii. 466) that *rexi* and *texi* have *ē*.

c) In the testimony of the Romance languages, which point to *cīnxī*, *distīnxī*, *exstīnxī*, *fīnxī*, *pīnxī*, *strūxi*, *tīnxī*, *ūnxī*.

d) The long *ā* in *sānxī* rests upon no specific evidence, but may perhaps be safely inferred after the analogy of *sānctus*.

Until recently the principle was maintained (e.g. by Marx in his first edition) that all monosyllabic stems ending in *b*, *d*, or *g* had the hidden vowel long in the Perfect Indicative and Perfect Participle wherever euphonic changes occurred. According to this theory we should have e.g. *scindō*, *scindere*, *scidi*, *scissus*; *mērgō*, *mērgere*, *mērsī*, *mērsus*. This principle was first laid down by Lachmann (on Lucretius, i. 805) for Perfect Participles alone, and was subsequently assumed by other scholars to apply to the Perfect Indicative as well; but this position is now entirely abandoned. Each long vowel must be supported by specific evidence.

In the 3d edition of his *Hilfsbüchlein* (p. 1), Marx lays down the principle that all vowels are long in Latin before *nx* and *nt*. These combinations occur almost exclusively in the verbs given on pp. 51, 52. Whether the general principle is sound, may be questioned. For example, we have no definite evidence in favor of the long vowel before *nx* in *anxius*, *lanx*, or *phalanx*.

VERBAL ENDINGS.

47. 1. The hidden vowel is short before *ss* (§ 40. 4) and *st* in the terminations of the verb, e.g. *fuīssēm*, *amāvīssē*; *fuīstī*, *fuīstis*. This is shown not only by the historical origin of these formations, but by such metrical usage as Plautus, *Amphitruo*, 761, *dedīssē*; *Menaechmi*, 687, *dedīstī*, where *iss* and *ist* are treated as short

syllables by neglect of 'position' (see § 36. 2). Contracted forms are, of course, an exception to the above principle, as *amāsse*, *commōssem*, *redīsse*, *audīssēt*, *amāstī*, *nōstis*.

2. Formations of the type: *dīxtī* (for *dīxistī*), *accēstis* (for *accessistis*), *jūstī* (for *jussistī*), *trāxe*, *surrēxe*, *exstīnxem*, etc., have the same quantity as the regular forms.

COMPOUNDS.

48. Marx (p. 8) holds that the vowel of a monosyllabic preposition, if hidden, is long in composition when the preposition loses a final consonant. Thus he maintains a long vowel for the initial syllable of *ascendō* (for **ad-scandō*); *dī-stinguō* (**dis-stinguō*); *suspiciō* (for **sub-spiciō*). But this principle rests upon an untenable theory of compensatory lengthening; see § 89.

INCHOATIVES.

49. Inchoatives in *-scō*, *-scor* have a long vowel before *-sc*, e.g. *labāscō*, *flōrēscō*, *nitēscō*, *tremīscō*, *adipīscor*. Gellius (*Noctes Atticae*, vi. 15) mentions a number of words of this class as having a long vowel, and implies that this was generally true of all. The Romance languages show that *-scō* and *-iscō* (*-iscor*) had *ē* and *ī*. But the hidden vowel is short in *compescō*, *discō*, *poscō*, *vescor*.

IRREGULAR VERBS.

50. 1. The root vowel of *esse* is short under all circumstances, e.g. *ēst*, *ēstis*, *ēstō*, *ēssem*.

2. *Edō*, 'eat,' has a long *e* in the forms *ēs*, *ēst*, *ēstis*, *ēssem*, *ēsse*, *ēstur*, *ēssetur*. Cf. Donatus on Terence, *Andria*, 81; Servius on Virgil, *Aeneid*, v. 785.

3. Marx (p. 9) lays down the principle that in compounds of *eō*, forms containing *ii* have the second *i* long before *st*, as e.g. in

interiistī. This theory rests solely upon the occurrence of INTERIESTI in CIL. i. 1202. But EI occurs elsewhere in inscriptions, incorrectly written for ĭ, e.g. PARENTEIS (= *parentis*), CIL. i. 1009; FACEIVNDAE (= *faciundae*). It is altogether probable that INTERIESTI is another instance of the same sort.

WORD FORMATION.

51. 1. Substantives in *-abrum*, *-acrum*, *-atrum*, derived from verbs, have *ā*, e.g. *flābrum*, *lavācrum*, *arātrum*.

2. The derivative endings *-ellus* (*a, um*), *-illus* (*a, um*), regularly have *ĕ* and *ĭ*, but the following have a long vowel, viz.: *catēlla*, 'little chain,' *anguilla*, *Bovillae*, *hīllae*, *ovillus*, *stilla*, *suillus*, *vīlla*.

3. The vowel is short in *-ernus* (*-ernius*, *-erninus*), *-urnus* (*-urnius*, *-urninus*), e.g. *hībērnus*, *tabērna*, *Sātŭrnus*. In *vērnus* (from *vēr*) the *r* is not a part of the suffix.

4. The vowel is short in the endings *-estus* (*-ester*, *-estris*, *-esticus*, *-estās*), *-ister* (*-istrum*), *-ustus*, e.g. *caelēstis*, *domēsticus*, *tempestās*, *capistrum*, *venūstus*. In *sēmēstris*, *jūstus*, the long vowel belongs to the stem.

5. The vowel is short in the endings *-unculus*, *-unciō*, *-erculus*, *-usculus*, e.g. *ратиuncula*, *paterculus*, *maiusculus*, *homunciō*; *plūsculus* (from *plūs*) naturally has *ū*.

6. In compounds, the connecting vowel *i* is short, e.g. *nāvīfragus*, *lectīsternium*.

52. LIST OF THE MOST IMPORTANT WORDS CONTAINING A LONG VOWEL BEFORE TWO CONSONANTS.¹

A.	B.
<i>abiēgnus</i> : see § 38, end.	<i>bārdus</i> , 'stupid' : from <i>bārō</i> .
<i>acatalēctus</i> : Gr. ἀκατάληκτος.	<i>Bēdriacum</i> : Βητριάκον, Plutarch, Otho, 8, 11.
<i>āctiō</i> , <i>āctitō</i> , <i>āctor</i> : see <i>agō</i> .	<i>bēllua</i> : for <i>bēs-lua</i> .
<i>āctūtum</i> : like <i>āctus</i> .	<i>bēstia</i> , <i>Bēstia</i> : Βηστίας; Plutarch, Marius, 9; Cicero, 3; the Ro- mance would point to <i>ē</i> .
<i>adēmp̄tiō</i> : see <i>adimō</i> .	<i>bifōrmis</i> : see <i>fōrma</i> .
<i>adimō</i> , <i>adēmp̄tus</i> : like <i>emō</i> .	<i>bilibris</i> : like <i>libra</i> .
<i>afflīctō</i> : like <i>flic̄tus</i> .	<i>bimēstris</i> : from <i>mēnsis</i> .
<i>Āfrica</i> , <i>Āfri</i> : from <i>Āfer</i> .	<i>bovillus</i> : from <i>bovīnus</i> .
<i>agō</i> , <i>agere</i> , <i>ēgī</i> , <i>āctus</i> : see § 46. 3. <i>ō</i>).	<i>būbrēstis</i> : Gr. βούβρηστις.
<i>Alcēstis</i> : Gr. Ἀλκηστις.	<i>būrrus</i> : <i>ū</i> acc. to the Romance.
<i>Ālēctō</i> : Gr. Ἀληκτώ.	<i>būstum</i> : <i>ū</i> acc. to the Romance; <i>cf.</i> <i>combūstus</i> and <i>ūstus</i> .
<i>aliōrsūm</i> : for * <i>alio-vorsum</i> .	<i>Būthrōtum</i> : Βούθρωτον.
<i>alīptēs</i> : Gr. ἀλείπτης.	
<i>Amāzōn</i> : Gr. Ἀμάζων.	
<i>ambūstus</i> : see <i>ūrō</i> .	
<i>Ansānctus</i> : see <i>sānctus</i> .	
<i>anguilla</i> : <i>ī</i> acc. to the Romance.	
<i>Aquillius</i> : AQUILLIVS : CIL. vi. 12264.	
<i>arātrum</i> : see § 51. 1.	
<i>ārdeō</i> , <i>-ēre</i> , <i>ārsī</i> , <i>ārsūrus</i> : like <i>āridus</i> , <i>ārdus</i> .	
<i>Arginūssae</i> : Gr. Ἀργινούσσαι.	
<i>āsp̄nor</i> : from <i>ā</i> and <i>sp̄nor</i> .	
<i>āthla</i> : Gr. ἄθλον.	
<i>āthlētes</i> : Gr. ἄθλητής.	
<i>ātrāmentum</i> : like <i>āter</i> .	
<i>ātrium</i> : from <i>āter</i> ; also ĀTRIVM, CIL. vi. 10025.	
<i>āxilla</i> : Priscian, iii. 36.	
	C.
	<i>catalēctus</i> : Gr. κατάληκτος.
	<i>catēlla</i> : from <i>catēna</i> ; <i>catella</i> , 'bitch,' has <i>ē</i> .
	<i>catillus</i> : from <i>catinus</i> .
	<i>cētra</i> : better orthography is <i>caetra</i> ; see § 61.
	<i>chirūrgus</i> : Gr. χειρουργός.
	<i>cicātrix</i> : <i>ā</i> in Plautus, <i>Amphitruo</i> , 446; see § 36. 2.
	<i>cīccus</i> , <i>-um</i> : <i>ī</i> acc. to the Romance.

¹ The following classes of words are omitted from this list: —

- a) Most derivatives and compounds.
- b) All words containing *ns* or *nf*.
- c) Inchoatives in *-āscō*, *-ēscō*, *-īscō*.
- d) Some rare Greek loan-words and proper names.
- e) Nouns and adjectives in *-x*, whose Genitive (acc. to § 42. 2) shows the preceding vowel to be long.

Cīncius: CINCIA, CIL. vi. 14817 *et passim*.

cīngō, cingere, cīnxī, cīnctus: ī in the Perfect and Perfect Participle acc. to the Romance; see Körtling (*Wörterbuch*): d'Ovidio (*Gröber's Grundriss*, i. p. 501 f.); CINCTVS, CIL. x. 4104; see § 53 s. v.

clandēstinus: from *clam* and *dēs(i)tus* from *dēsino* (*cf. positus* from *pōnō, i.e. po-sinō*); hence 'secretly put aside.'

clātra, clātrī: Gr. κληῖτρα.

Clytēmēstra: Gr. Κλυταιμήστρα.

Cnōssus: Gr. Κνωσός.

cōgō, cōgere, cōgēi, cōactus: see *agō*.

combūrō, combūrere, combussī, combūstus: see *ūrō* and *būstum*. Marx also marks the *o* long, regarding *cōmbūrō* as for *co-ambūrō*, and comparing *cōgitō* (for *co-agitō*).

comedō, comēstus: *cf. edō*; see § 50. 2.

cōmō, cōmere, cōmpsī, cōmptus: *ō* acc. to the Romance.

compīngō, compīngere, compēgī, compāctus: see § 46. 3. *b*).

conjūnx: CONIŪNX, CIL. vi. 6592 *et passim*; but *conjux* has *ū*.

contīngō, -ere, contīgī, contāctus: like *tangō*.

cōntiō: for *co-ventiō*; § 40. 2. *a*).

corōlla: from *corōna*.

crābrō: *ā* in Plautus, *Amphitruo*, 707; see § 36. 2.

crāstinus: from *crās*.

crēscō: CRĒSCĒNS, CIL. xii. 4030 *et passim*; Gr. Κρήσκων; also acc. to the Romance.

Crēssa: Κρήσσα.

cribrum: ī in Plautus, *Mostellaria*, 55; see § 36. 2.

crispus: CREISPINVS, CIL. x. 3514.

Κρεισπείνον, CIG. Addenda, 4342, d. 4. The Romance would point to ī; but see § 36. 5 fin.

crūsta, crūstum: ū in CIL. i. 1199; the Romance points both to *crūstum* and also to a collateral form with *ū*. Gröber (*Archiv*, vi. 384); Körtling (*Wörterbuch*).

Ctēsiphōn, -ōntis: Gr. -ῶν, -ῶντος.

cucūllus, 'hood': the Romance points to two forms, — one with *ū*, another with *ū*; see Gröber (*Archiv*, i. 555; vi. 384); Körtling (*Wörterbuch*); *cucullus*, 'cuckoo,' has *ū*.

cūnctus: CŪNCTI, CIL. ix. 60.

cūstōs: Κουστῶδης, Lydus, *de Magistratibus*, i. 46; *ū* acc. to the Romance.

Cyclōps: Gr. Κύκλωψ.

D.

dēligō, -ere, dēlēgī, dēlēctus: like *legō*.

dēlinquō, -ere, dēliquī, dēlictus: ī acc. to the Romance.

dēlūbrum: ū in Plautus, *Poenulus*, 1175; see § 36. 2.

dēmō, dēmere, dēmpsī, dēemptus; like *emō*.

dēūnx: from *dē* and *ūncia*.

dēxtāns: from *dē* + *sextāns*.

dīcō, dīcere, dīxī, dīctus: see § 46.

3. *a*). Certain of the Romance languages (Fr. *dit*; Old Ital. *ditto*, etc.) point to a collateral *dīctus*, which Osthoff (*Morphologische Untersuchungen*, iv. 74) thinks belonged to the colloquial language. But possibly those Romance languages which point to ī have simply adapted the Participle to the vowel of the Present and the Perfect. See Gröber (*Archiv*, vi. 385).

dictērium : Gr. δεικτήριον.

Diēspiter : for *dīēs* and *pater*.

digladiator : for *dis* + *gladiator* by compensatory lengthening ; see § 89.

digredior : for *dis* + *gradior* by compensatory lengthening ; see § 89.

dilēmma : Gr. διλήμμα.

diligō, -ere, *dilēxī*, *dilēctus* : like *legō*.

dirigō, -ere, *dirēxī*, *dirēctus* : like *regō*.

dirimō, -ere, *dirēmī*, *dirēptus* : like *emō*.

distinguō, -ere, *distīnxī*, *distīctus* : *ī* acc. to the Romance ; see d'Ovidio (*Gröber's Grundriss*, i. p. 502) ; Körtling (*Wörterbuch*) ; cf. *exstinguō* ; see § 46. 3. *b*.

dolābra : cf. § 51. 1.

dūcō, *dūcere*, *dūxī*, *dūctus* : see § 46. 3. *a*) ; *PERDŪXIT*, CIL. xii. 2346 *et passim*.

E.

ēbrius : *ē* regularly in Plautus, e.g.

Trinummus, 812 ; see § 36. 2.

eclīpsis : Gr. ἡκλειψις.

edō, 'eat' : *ēst*, *ēstis*, *ēsse*, etc. See § 50. 2.

effringō, -ere, *effrēgī*, *effractus* : like *frangō*.

emō, *emere*, *ēmī*, *ēmtus* : see § 46. 3. *b*).

ēmungō, -ere, —, *ēmūnctus* : *ū* acc. to the Romance ; see d'Ovidio (*Gröber's Grundriss*, i. p. 515).

erigō, -ere, *erēxī*, *erēctus* : like *regō*.

ēscā : *ē* acc. to the Romance.

Ēsquiliae, *Ēsquiliūnus* : Gr. Ἑσκυλῖνος, in Strabo, v. 234, 237.

Etrūscus : cf. *Etrūria* ; Gr. Ἑτροῦσκος.

exīstimō : from *ex* and *aestimō* ; *EXI-STIMAUERVNT*, CIL. v. 5050.

exōrdium : from *ōrdior*.

exstinguō, -ere, *exstīnxī*, *exstīctus* :

EXTINCTOS, CIL. vi. 25617 ; cf.

distinguō ; see § 46. 3. *b*.

extraōrdinārius : from *ōrdō*.

F.

fāstus, *a*, *um* ; cf. *fās*.

favilla : *FAVILLA*, CIL. v. 3143. The Romance also seems to point to *ī*.

fēllō : from same root as *fēmīna* ; Gr. θῆλυς.

fēstivus : from *fēstus*.

fēstus : from the same root as *fēriæ* (= **fēs-iaē*), 'holiday' ; *FESTVS* in CIL. i., *Fasti Praenestini* for April 25th. So also in the proper name :

Fēstus : *FESTVS*, CIL. xii. 3179 ; *FESTI*, v. 2627 ; *FESTAE*, iii. 5353 ; Gr. Φῆστος, CIA. iii. 635 and frequently. The Romance points to *ē*, indicating that *ē* of the classical period ultimately became reduced ; see § 36. 5.

figō, *figere*, *fīxī*, *fīxus* : *FIXA*, *Monumentum Ancyranum*, vi. 18 ; *ī* acc. to the Romance.

fungō, *fungere*, *fīnxī*, *fīctus* : *ī* acc. to the Romance ; see § 53 s. v.

firmus : *FIRMVM*, CIL. iv. 175 *et passim* ; the Romance points to *ī*, showing that *ī* of the classical period had become reduced ; see § 36. 5.

flābrum : see § 51. 1.

fligō, -ere, *flīxī*, *flīctus* : *AFLEICTA*, CIL. i. 1175 ; the Romance also points to *ī*.

flōsculus : from *flōs*.

flūctus : *ū* acc. to the Romance.

fluō, -ere, *flūxī* ; *ū* is probably long in *flūxī* in view of *flūxus*.

flūxus : *ū* acc. to the Romance.

fōrma : see Donatus on Terence, *Phormio*, 28; φώρμη in Greek inscriptions; the Romance also shows *ō*.

fōrmula : from *fōrma*.

frangō, -ere, frēgī, fractus : see § 46. 3. *ō*).

frīgeō, -ēre, frīxī : § 46. 3.

frīgō, -ere, frīxī, frictus : *ī* acc. to the Romance.

fructus : *ū* acc. to the Romance. Old French *froit* points to a collateral *fructus*; see Osthoff, *Geschichte des Perfects*, p. 523.

fruor, fruī, fructus sum : *ū* acc. to the Romance.

frustrā : FRŪSTRĀ, CIL. vi. 20370.

frustum : *ū* acc. to the Romance.

fungor, fungī, fūctus sum : DEFUNCTIS, CIL. v. 1326; FVNCTO, xii. 3176 *et passim*.

fūrtim : from *fūr*.

fūrtīvus : from *fūr*.

fūrtum : from *fūr*.

fūstis : *ū* acc. to the Romance.

G.

geōgraphia : Gr. γεωγραφία.

Geōrgius : Gr. Γεώργιος.

geōrgicus : Gr. γεωργικός.

gliscō : § 49.

glōssārium : from Gr. γλῶσσα.

glōssēma : from Gr. γλωσσήμα.

grȳllus : *ȳ* acc. to the Romance.

grȳps : like Gen. *grȳpis*; § 42. 2.

H.

hāctenus : like *hāc*.

Hellēspontus : Gr. Ἑλλησποντος.

Herculanum : HERCVLĀNIAE, CIL. xii. 1357; Ἡρκουλάνεον, Dio Cassius, lxi. 23; Ἡρκλανός, CIA. iii. 1197.

hibiscum : *ī* acc. to the Romance.

hillae : from *hīra*.

hirsūtus : like *hīrtus*.

Hirtiūs and *hīrtus* : *ī* acc. to the Romance.

hiscō : see § 49.

Hispellum : cf. Gr. Εἰσπέλλον, Strabo, v. 227.

Hīspo, Hīspulla : like *Hispellum*.

hōrnus : from *hōra*?

hōrsūm : for **ho-vorsum*.

hydrōps : like Gen. *hydrōpis*; § 42. 2.

Hymēttus : Gr. Ὑμηττός.

Hypermēstra : Gr. Ὑπερμήστρα.

I.

ignis : IGNIS, CIL. xi. 826.

illōrsūm : for **illo-vorsum*.

illūstris : from *lūx*.

Illyria : EILLVRICO, CIL. i². p. 77.

impingō -ere, impēgī, impāctus : see § 46. 3. *ō*).

infestus : INFESTI, CIL. v. 2627; cf. *manifestus*.

instinctus : see *distinguō*.

intellegō, intellegere, intellēxī, intellēctus : like *legō*.

intervāllum : from *vāllus*.

intrōrsūm : for **intro-vorsum*.

involūcrum : *ū* in Plautus, *Captivi*, 267; § 36. 2.

Iōlcus : Gr. Ἰωλκός.

istōrsūm : for **isto-vorsum*.

J.

jēntāculum : see § 40. 2. *a*).

jēntātiō : see § 40. 2. *a*).

jūglāns : from *Jov-* and *glāns*.

jungō, -ere, jūnxī, jūnctus; see § 46. 3. *ō*).

jūrgō : for *jūrigō*, from *jūs*.

Jūstinianus : from *jūstus*.

jūstitium : from *jūs*.

jūstus : from *jūs* : also *IVSTO*, CIL. ii. 210 ; v. 5919.

jūxtā, *jūxtim* : from *jūgis* 'joined with.'

L.

lābor, *lābī*, *lāpsus sum* : see § 46. 3 ; *DILĀPSAM*, CIL. xi. 3123.

lābrum, 'bowl' : for *lavābrum* ; *labrum*, 'lip,' has *ā*.

labrūsca : *ū* acc. to the Romance.

laevōrsus : for **laevo-vorsus*.

lāmna : syncopated for *lāmīna*.

lārdum : syncopated for *lāridum*.

Lārs, *Lārtis* : *LART-*, CIL. x. 633.

lārva : like *lārva*, the early Latin form, e.g. Plautus, *Amphitruo*, 777 ; *Captivi*, 598.

lātrīna : for *lavātrīna* ; cf. Plautus, *Curculio*, 580 ; § 36. 2.

lātrō, 'bark' : *ā* in *oblātrātrīcem*, Plautus, *Miles Gloriosus*, 681 ; § 36. 2.

lavābrum : see § 51. 1.

lavācrum : see § 51. 1.

legō, -ere, *lēgī*, *lēctus* : see § 46. 3.

lēmma : Gr. λήμμα.

lēmniscus : Gr. λεμνίσκος.

Lēmnos : Gr. Λήμνος.

lentiscus : *ī* acc. to the Romance.

libra : *ī* in Plautus, *Pseudolus*, 816 ; § 36. 2.

librō : like *libra*.

līctor : *LICTOR*, CIL. vi. 699 and often ; *LICTOR*, *Ephemeris Epigraphica*, v. 51 ; λεκτωρ, Eckinger (*Orthographie Lateinischer Wörter in Griechischen Inschriften*, p. 43).

līmpidus : *ī* acc. to the Romance.

līngō, ere, *līnxī*, *līnctus* : *ī* acc. to the Romance.

lūbricus : *ū* in Plautus, *Miles Gloriosus*, 853 ; § 36. 2.

lūceō, -ēre, *lūxī* : see § 46. 3.

lūcta : *ū* acc. to the Romance.

lūctor : like *lūcta*.

lūctus : from *lūgeō* : also *LŪCTVM*, CIL. vi. 1527 e. 66 ; *LŪCTV*, CIL. v. 337 ; x. 4041. 2.

lūgeō, *lūgere*, *lūxī* : see § 46. 3.

lūstrum, 'expiation' : *LŪSTRVM*, *Monumentum Ancyranum*, ii. 3, 5, 8 ; ii. 3, 6, 10 ; *lustrum*, 'haunt,' has *ū*.

lūstrō : like *lūstrum*.

lūxuria : see *lūxus*.

lūxus : *ū* acc. to the Romance.

Lycūrgus : Gr. Λυκούργος.

M.

mālle : for **mag(e)* (*magis*) + *velle*. *manifestus* : [*MANI*] *FESTVM*, CIL. i. p. 319 ; very uncertain.

Mānlius : from *Mānius* ; *MÁNLIO*, *MÁNLIA*, CIL. v. 615 ; *MÁNLIAE*, ix. 3942.

manūpretium : *ū* in Plaut. *Men.* 544.

Mārcellus, *Mārcella* : from *Mārcus* ; *MARCELLA*, CIL. xii. 3188.

Mārcius : from *Mārcus* ; *MÁRCIVS*, CIL. v. 555 *et passim* ; *Μάρκιον*, CIG. 1137.

Mārcus : *MAARCO*, CIL. i. 1006 ; xiv. 2802 ; *MÁRCI*, Boissieu, *Inscriptions de Lyon*, p. 143 ; *Μάρκος*, CIG. 887 *et passim*.

Mārs, *Mārtis* : *MÁRTIS*, *Monumentum Ancyranum*, iv. 21 ; CIL. x. 809 *et passim*.

Mārsī : like *Mārs*.

Mārtiālis : like *Mārs*.

māssa : Gr. μᾶζα.

mātrimōnium : from *māter*.

mātrix : from *māter*.
mātrōna : from *māter*; *MÁTRŌNA*,
 CIL. v. 5249.
māxilla : according to Priscian, iii.
 36. (Keil).
māza : Gr. *μάζα*. See Cramer, *Anecdota Oxoniensia*, iii. 293.
mercēnnārius : for **mercēd-nārius*.
Mētrōdōrus : Gr. *Μητροδωρος*.
mētrōpolis : Gr. *μητρόπολις*.
mille, *millia* : *MILLIA*, *Monumentum Ancyranum*, i. 16; *MILLIENS*, iii. 34; *ī* acc. to the Romance.
mīlvus : as in the early Latin *mīluos*.
Mōstellāria : from *mōnstrum*.
mūcrō : *ū* in *Atta*, *Frag.* 13 (ed. Ribbeck); § 36. 2.
mūlleus : *ū* acc. to the Romance.
mūllus : *ū* acc. to the Romance.
mūscerda : from *mūs*.
mūsculus : from *mūs*.
mūscus : *ū* acc. to the Romance.
mūstēla : from *mūs*.
Mycalēssus : Gr. *Μυκαλησσός*.

N.

nancīscor : see § 49.
Nārnīa : Umbrian *Nahar-* (= *ā*).
nārrō : *NÁRREM*, Boissieu, *Inscriptions de Lyon*, p. 136.
nāscor : § 49; *NÁSCERER*, *Monumentum Ancyranum*, ii. 44; *NÁSCENTIBVS*, CIL. xii. 3702.
nāsturcium : from *nāsus*.
nefastus : from *nefās*.
neglegō, -ere, *neglēxī*, *neglēctus*; see *legō*.
nēquīdquam (*nēquīcquam*) : from Abl. *quīd*.
nītor, *nīti*, *nīxus sum* : see § 46. 3.
nōlle : by contraction from **nōvelle* (for **nē-velle*; § 73. 3).

nōndum : from *nōn* and *dum*; *NŌNDVM*, CIL. x. 4041. 6.
nōngentī : for **no(v)engenti*.
nōnne : from *nōn*.
nōnnūllī : from *nōn* and *nūllus*.
Nōrba : Gr. *Νόρβη*.
nōscō : *ō* acc. to the Romance.
nūbō, -ere, *nūpsī*, *nūpta* : see § 46. 3.
nudiūstertius, *quārtus*, etc. : see § 86.
nūllus : from *ne* and *ūllus*; *NŪLLVM*, CIL. x. 4787.
nūndinae, *nūndinum* : for **no(v)endinae*; *noundinae* in early Latin; *NŪNDINVS*, CIL. xii. 3650.
nūntius : for **nove-ntius*? ('news-bringer').
nūntiō : like *nūntius*.
nūptiae : like *nūpta*.
nūsqum : like *ūsqum*.
nūtrio : like *nūtrix*.
nūtrix : *ū* in Plautus, *Curculio*, 643; *nūtrīcātus*, *Miles Gloriosus*, 656; *nūtrīcant*, *Miles Gloriosus*, 715; § 36. 2.

O.

oblīvīscor : see § 49; *OBLIVISCEMVR*, CIL. vi. 6250.
Oenōtria : Gr. *Οινωτρία*.
ōlla : for *aulula*; *ŌLLA*, CIL. vi. 10006 et *passim*.
Onchēstus : Gr. *Ὠγχηστος*.
Opūs, -*ūntis* : Gr. *Ὀπούντος*.
ōrca : *ō* acc. to the Romance.
orchēstra : Gr. *ὀρχήστρα*.
ōrdior : like *ōrdō*.
ōrdō : *ŌRDINIS*, Boissieu, *Inscriptions de Lyon*, p. 136; CIL. ix. 5177; xii. 3312; *ō* acc. to the Romance.
ōrnō : *ŌRNARE*, CIL. xii. 4333 et *passim*.
ōrnāmentum : *ŌRNAMENTIS*, CIL. xii. 3203 et *passim*; cf. *ōrnō*.

ōscen : from *ōs*.

ōscillum : from *ōsculum*.

ōscitō : from *ōs*.

ōsculor : from *ōs*.

Ōstia : from *ōs* ; Gr. Ὀστία.

ōstium : from *ōs* ; ὄστια, scholion to Aristophanes, *Plutus*, 330 ; ὄστιν, CIL, vi. 4710 ; ὄστιον, *Monumentum Ancyranum*, v. 14.

ovillus : from *ovinus*.

Ōxus : Gr. Ὄξος, in Strabo.

P.

pacīscor, *pacīscī*, *pactus sum* : see § 49.

palimpsēstus : Gr. παλινψηστος.

palūster : from *palūs*.

pangō, *pangere*, *pēpigī*, *pactus* : the compounds *impactus*, *compactus*, point to *ā* ; see § 46. 4. c).

paradigmā : Gr. παράδειγμα.

pāscō, *pāscere*, *pāvī*, *pastus* : see § 49.

pāstillus : like *pāscō*.

pāstiō : like *pastus*.

pāstor : like *pastus* ; PASTORES, CIL. i. 551 ; PASTŌRIS, CIL. x. 827.

pāxillus : acc. to Priscian, iii. 36.

pēgma : Gr. πῆγμα.

pentāthlum : Gr. πένθλον.

perēnptālis : from *perēnptus* (*emō*).

pergō, *pergere*, *perrēxī*, *perrēctus* : like *regō*.

perīclitor : like *perīculum*.

perimō, *-ere*, *perēmī*, *perēnptus* : like *emō*.

Permēssus : Gr. Περμησός.

perrēptō : from *rēptō* (*rēpō*).

persōlla, for *persōn(u)la*, from *persōna*.

Pessinūs, *-ūntis* : Gr. Πεσσινοῦντος.

Phoenīssa : like *Phoenīx*.

pīctor : like *pīctus* (*pingō*).

pīctūra : like *pīctus*.

pīgmentum : PIGMENT-, CIL. viii. 1344 ; *ī* acc. to the Romance.

pingō, *pingere*, *pīnxī*, *pīctus* : see under *jingō*, which is precisely parallel.

pīstillum, *pīstor*, *pīstus* (from *pīnsō*), *pīstrinum*, *pīstrilla* : PISTVS, CIL. v. 6998. The Romance evidence is conflicting, but is favorable to *ī*.

Pīstōria : like *pīstor*.

plēbiscitum : = *plēbī scitum*, and better so written.

plēbs : like genitive *plēbis* ; PLĒPS, CIL. v. 6797 ; xii. 4333.

plēctrum : Gr. πλῆκτρον.

Plīsthenēs : Gr. Πλεισθένης.

plōstellum : from *plaustrum*.

plūsculum : from *plūs*.

poētria, *-is* : Gr. ποιητρία, ποιητρίς.

Pōlla : = *Paulla* ; PŌLLA, CIL. xii. 3471 ; cf. *Pōlliō*.

pollingō, *-ere*, *līnxī*, *līnctus* : like *lingō*.

pollīnctor : like *pollīnctus*.

Pōlliō : from *Paullus* ; PŌLLIO, CIL. vi. 22840 et passim ; Πωλλίων in Plutarch, Dio Cassius, and elsewhere.

pollūceō, *-ere*, *-ūxī* : § 46. 3.

Polymēstor : Gr. Πολυμήστωρ.

porrigō, *-ere*, *porrēxī*, *porrēctus* : like *regō*.

praelūstris : like *lūx*.

prāgmaticus : Gr. πρᾶγματικός.

Prāxitelēs : Gr. Πράξιτέλης (πράξις).

prēndō : for *pre-hendō*.

primōrdium : from *ōrdior*.

princeps : from *primus* and *capīō*.

prīncipālīs : from *princeps*.

prīncipātus : from *princeps*.

prīncipium : from *princeps*.

Prīsciānus : from *prīscus*.

prīscus and *Prīscus* : PRISCVS, CIL. xi. 1940 ; PRISCVS, CIL. ix. 4354. c ; Πρεῖσκος CIG. 4494 et passim.

prīstinus : like *prīscus*.

prōcrāstinō : from *crās*.

Procrūstēs : Gr. Προκρούστης.

profēstus : from *fēstus*.

prōmō, -ere, *prōmpsi*, *prōmptus* : see § 46. 3.

prōrsum, *prōrsus* : for **pro-vorsum*, -sus.

prōsperus : from *prō* **spēre* ? ('according to expectation').

prōstibulum : from *prō* and *stabulum*.

Pūblicius, *Pūblicola* : from *pūblicus*.

Poplicola is another word, viz. from *poplus*, early form of *populus*, 'people.'

pūblicus : from *pūbes*; PŪBLICŌR[VM, CIL. vi. 1377; *ū* in Plautus, *Miles Gloriosus*, 102, 103; *Captivi*, 334 *et passim*; § 36. 2; *ū* also acc. to the Romance.

Pūblius : like *Pūblius*.

Pūblius : like *pūblicus*.

pulvillus : from *pulvīnus*; PVLVILLVS, CIL. i. *Fasti Cap.*, a. 297.

pungō, -ere, *pupugī*, *pūctus* : *ū* acc. to the Romance.

pūctus : see *pungō*.

pūrgō : for **pūrigō* (*pūrus*) : *ū* also acc. to the Romance.

pūrgāmentum : from *pūrgō*.

pūrgātiō : from *pūrgō*.

pūstula : from *pūs*; *ū* acc. to the Romance.

Q.

quārtus : QUÁRTVS, CIL. iii. 4959; *Monumentum Ancyranum*, iii. 22 *et passim*.

quārtānus : like *quārtus*.

quārtārius : like *quārtus*.

quīescō : acc. to Gellius, *Noctes Atticae*, vii. 15, some persons pronounced *quīescō* in his day; but

other -*scō* formations have practically invariably *ē* before *sc* : *quīēvī* and *quīētus* also point to *quīescō*; QVĪESCERE is found CIL. vi. 25531.

quīncūnx : from *quīnque* and *ūncia*.
quīndecim : from *quīnque* and *decem*; *ī* acc. to the Romance.

quīngentī, *quīngēnī*, *quīngentiēs* : from *quīnque*.

Quīnquātrūs : from *quīnque*; *ā* in Plautus, *Miles Gloriosus*, 691; § 36. 2.

quīnque : QVĪNQVE, CIL. vi. 3539 *et passim*; *ī* acc. to the Romance.

quīnquāgintā : from *quīnque*.

quīnquennium : from *quīnque*.

quīnquiēs : from *quīnque*.

quīntāna : from *quīntus*.

Quīntiliānus : from *quīntus*.

Quīntilis : from *quīntus*.

Quīntilius : from *quīntus*; QVĪNCTILIO, CIL. iii. 384.

quīntus, *Quīntus*, *Quīnctius* : QVĪNTVM, *Monumentum Ancyranum*, iii. 1; *i longa* occurs repeatedly; Κβειντος, CIG. 2003; *ī* acc. to the Romance.

quīppe : for **quīd* (Abl.) and -*pe*.

quōrsum, *quōrsus* : for **quō-vorsum*, **quō-vorsus*.

R.

rāllus : for *rār(u)lus* from *rārus*.

rāstrum : from *rādō*.

reāpse : for *rē eāpse* (Abl. of *ipsa*).

rēctē, *rēctor* : like *rēctus*.

rēctus : see *regō*.

redīgō, -ere, *redēgī*, *redāctus* : like *agō*.

redīmō, -ere, *redēmī*, *redēptus* : like *emō*; Πεδήνπτα, CIG. 9811; REDĒPTA, CIL. vi. 22251.

redēptiō, redēptor : from *redimō*.

rēgnūm : see § 38, end.

rēgnō : like *rēgnūm*.

rēgnātor, rēgnātrīx : from *rēgnō*.

regō, -ere, rēxī, rēctus : see § 46. 3. b).

relinquō, -ere, reliquī, relictus : see § 46. 3. b).

reminīscor, -ī : see § 49.

rēpō, rēpere, rēpsī, rēptum : see § 46. 3.

restinguō, -ere, restīnxī, restinctus : see *distinguō*.

rixa : *i* acc. to the Romance.

rōscidus : from *rōs*.

Rōscius : *RŪSCIO*, CIL. vi. 2060, 5 ; 'Ρώσκιος, Plutarch, *Cicero*, 3 ; 5 ; *Pompey*, 15.

rōstrum : from *rōdō* ; ῥῶστρον, *He-sychius*.

Rōstra : from *rōstrum*.

Rōxāna : Gr. 'Ρωξάνη.

rūctō : acc. to the Romance (Gröber, *Archiv*, v. p. 370), which points also to a form with *ŭ*.

rūctus : like *rūctō*.

rūrsum, rūrsus : for **re-vorsum*, **re-vorsus*.

rūscum : *ū* acc. to the Romance.

rūsticus : from *rūs* ; *RŪSTICVS*, CIL. ix, 4012 ; *ū* acc. to the Romance.

S.

sanciō, sancīre, sānxī, sānctus : see § 46. 3. b).

sārculūm : like *sāriō*.

Sārsina : *SÁSSINAS* in an inscription.

scēptrum : Gr. σκήπτρον.

scīscō : see § 49 ; *D[ESC]ISCENTEM*, *Monumentum Ancyranum*, v. 28.

scribō, -ere, scrīpsī, scrīptus : see § 46. 3 ; *SCRİPTVM*, CIL. vi. 2011 ; *CON-*

SCRİPTVM, CIL. i. 206. 87 ; 109 ; *CŌNSCRİPTIS*, CIL. x. 3903 ; *i* acc. to the Romance ; Umbrian *screibtor* = *scrīptōs* (Nom. Plu.).

scrīptiō, scrīptiō, scrīptor, scrīptūra : see *scribō*.

sēgmen : like *sēgmentum*.

sēgmentum : see § 39.

sēgnis : *SĒGNIS* in a Herculanean papyrus.

sēligō, sēligere, sēlēgī, sēlēctus : like *legō*.

Selinūs, -ūntis : Gr. Σελινόυντος.

sēmēstris : for **ses-mēstris*, **sexmēs-tris* ; see § 89.

sēmūncia : from *sēmi-* and *ūncia*.

septūnx : from *ūncia*.

sēsūncia : for *sēsqui-* and *ūncia*.

sēscuplex, sēscuplus : for *sēsqui-* and *-plex*.

Sesōstris : Σέσωστρίς.

sēsqui- : = *sēmisque-*.

sēstertius : for *sēmis tertius*.

Sēstius : Gr. Σήστιος, in Cic. *ad Att.* vii. 17. 2 *et passim* ; Σήστια, CIA. iii. 1450.

Sēstos, Sēstū : Gr. Σήστος, Σήστιοι.

Sīgnia : *SEIGNIA*, CIL. i. 11.

signum and *signum* : *SEIGNVM*, CIL. xiv. 4270 ; *SIGNA*, Boissieu, *Inscriptions de Lyon*, p. 606 ; see § 38.

significō, signō : like *signum*.

sīnciput : for *sēmi* + *caput*, i.e. *sīnciput* for **sēnciput*, by vowel assimilation ; see § 90.

sinistrōrsus : for **sinistro-vorsus*.

sīstrum : Gr. σείστρον.

sōbrius : *ō* in Plautus, *Miles Gloriosus*, 812 ; § 36. 2.

Sōcratēs : Gr. Σωκράτης.

sōlstitium : from *sōl*.

Sōphrōn : Gr. Σώφρων.

sōspes : Gr. Σῶσις, CIA. iii. 1161 *et passim*.

sōspita, *sōspitō* : like *sōspes*.

stāgnō : like *stāgnum*.

stāgnum : see § 38, end.

stilla : *ī* acc. to the Romance.

stillicidium, *stillō* : like *stilla*.

stringō, -ere, *strīnxī*, *strictus* : *strīnxī* acc. to the Romance.

struō, -ere, *strūxī*, *strūctus* : see § 46.

3. *b*) ; *ū* also acc. to the Romance.

strūctor : like *strūctus* ; cf. STRVCTOR, CIL. x. 708 ; *ū* acc. to Gellius, xii.

3. 4.

strūctūra : like *strūctus*.

sublūstris : like *lūx*.

substrūctiō : like *strūctus*.

suēscō : as in *suēvī*, *suētus*.

sūgō, -ere, *sūxī*, *sūctus* : see § 46. 3 ; *ū* acc. to the Romance.

suillus : from *suīnus*.

sūmō, -ere, *sūmpsi*, *sūmptus* : see § 46.

3 ; *ū* also acc. to the Romance.

sūmptus : from *sūmō*.

sūrculus : from *sūrus*.

surgō, -ere, *surrēxī*, *surrēctus* : like *regō*.

sūrsūm : for **su-vorsum*.

sūtrīna : like *sūtor*.

Sūtrium : *ū* in Plautus, *Casina*, 324 ; § 36. 2.

syllēpsis : Gr. σύλληψις.

T.

tangō, -ere, *tetigī*, *tāctus* : see § 46. 3. *b*).

tāctiō : like *tāctus*.

Tartēssus : Gr. Ταρτησός.

tāxillus : acc. to Priscian, iii. 36.

Tecmēssa : Gr. Τέκμησσα.

tēctum : from *tegō*.

tegō, -ere, *tēxī*, *tēctus* : see § 46. 3. *b*).

Telmēssus : Gr. Τελμησός.

Tēmnos : Gr. Τημνός.

Termēssus : Gr. Τερμησός.

terūctus : from *ūncia*.

theātrum : Gr. θέατρον.

Thrēssa : Gr. Θρησσα.

Tillius : TILLIVS, CIL. vi. 2043.

tingō, -ere, *tīnxī*, *tīnctus* : see § 46. 3. *b*).

trāctim : like *trāctus*.

trāctō : like *trāctus*.

trahō, -ere, *trāxī*, *trāctus* : see § 46. 3. *b*).

Trapezūs, -ūntis : Gr. Τραπεζούς, -οὔντος.

trifōrmis : from *fōrma*.

trilībris : like *lībra*.

trīstis : TRISTIOR, CIG. 6268 ; *ī* also acc. to the Romance.

trūlla : for *truella*. The Romance also points to *ū*.

trūcta : *ū* acc. to the Romance.

tubilūstrium : like *lūstrum*.

U.

ūllus : from *ūnus* ; ŪLLA, CIL. ii. 1473 ; ŪLLI, CIL. vi. 10230.

ūlna : Gr. ὠλένη.

ūlva : like *ūligō*.

ūncia : like *ūnus*.

ūnctiō : like *ūnctus* (*ungō*).

ūndecim, *ūndecimus* : from *ūnus* and *decem*.

ūndevīgintī, etc. : like *ūnus*.

ungō, -ere, *ūnxī*, *ūnctus* : see § 46. 3. *b*).

ūrō, -ere, *ussī*, *ūstus* ; *ū* in the Perfect Participle acc. to the Romance ; for the *ū* in *ussī*, see § 53 s. v.

ūspiam : like *ūsq̄ue*.

ūsq̄uam : like *ūsq̄ue*.

ūsq̄ue : *ū* acc. to the Romance.

ūstrīna : like *ūstus*.

ūsūrpō : *ūsū rapiō* ?

V.

vāllum, *vāllus* : VĀLLĀRI, CIL. ii.

4509 ; also VĀLLIVS, VĀLLIA, CIL.

xix. 4039.

vāllāris : see *vāllum*.

vāllō : see *vāllum*.

vāsculum : like *vās*.

vāstus : the Teutonic languages point to a long root vowel.

Vēctis, 'Isle of Wight' : Gr. Οὐκτίς.

vēgrandis : from *vē-* and *grandis*.

Vēlābrum : *ā* in Plautus, *Curculio*, 483 ; § 36. 2.

Venāfrum : the suffix is originally the same as *-ābrum* ; see § 51. I.

vēndō : from *vēnum* and *dō*.

vērnuus : from *vēr*.

vēstibulum : *vē* + *stabulum* ? Cf. *prōstibulum*.

vēstīgium : *vē* + *steigh-* ?

Vestīnī : Gr. Οὐηστίνιοι.

vēxillum : VĒXILLO, CIL. xii. 3167 ;

Byzantine Gr. βήξιλλα ; CIG. 4483,

οὐηξιλλατι(ώ)σιν ; also acc. to Priscian, iii. 36.

vīctus : from *vīvō*. The Romance also shows *ī*.

vīlla : VĪLLA, CIL. vi. 9834 ; the Romance points to *ī*.

vīndēmia : from *vīnum* and *dēmō*.

Vīpsānius : VĪPSANI, CIL. vi. 12782 ;

VĪPSANIA, CIL. vi. 8877 ; Βειψάνιος, CIG. 5709.

Vīpstānus : VĪPSTANVS, CIL. vi. 2039

and frequently ; Οὐειψτανού CIG. 5837, *b* ; CIA. iii. 621.

vīscus : VĪSCERIS, CIL. vi. 1975.

vīvō, *-ere*, *vīxī*, *vīctum* : see § 46. 3 ;

VEIXIT, CIL. xiv. 2485 ; VĪXIT,

CIL. ii. 3449 ; VĪCTVRO, CIL. vi.

12,562 ; βειξίτ in an inscription

cited by Eckinger (*Orthographie Lat. Wörter in Griech. Inschriften*, p. 43).

Vopīscus : Gr. Θύοπεισκος ; VOPISCO, CIL. x. 4872.

X.

Xenophōn, *-ōntis* : Gr. Ξενοφῶν, -ῶντος.

Z.

zōstēr : Gr. ζωστήρ.

53. WORDS WHOSE HIDDEN QUANTITIES ARE IN DISPUTE.

agmen : *ā* Marx ; see § 39.

agnātus, *agnōtus*, etc. : *ā* Marx ; see § 38.

agnus : *ā* acc. to many ; see § 38.

allicīō : some scholars mark the *e* of the Perfect long in *allexī*, *illexī*, *pellexī* ; and likewise in *-spexī* (*aspexī*, *cōnsplexī*, etc.), *flexī*, *pexī*, *vexī*. This marking rests upon a statement of Priscian in ix. 28. But Priscian in this passage simply says

that Perfects in *-xī* have a long vowel before the *x* only when the vowel is *e* ; he does not state that every *e* is long before *-xī*. Moreover, little weight is to be attached to this testimony ; for in the paragraph immediately preceding (ix. 27) Priscian lends the weight of his authority to such forms as *trāxxī*, *mānsī*, *dūxxī*, which certainly had a long vowel in the best period.

Osthoﬀ (*Geschichte des Perfects*, p. 227) and Brugmann (*Grundriss der Vergleichenden Grammatik*, ii. p. 1182) support \bar{e} in Perfects of this type by arguments drawn from comparative grammar; but the evidence does not warrant a positive conclusion in their favor.

allium: \bar{a} Marx; see § 88. 1.

amygdalum: \bar{y} Marx, without citation of evidence, Gröber (*Archiv*, i. 240) and Körting (*Wörterbuch*) give y .

anxius: \bar{a} Marx, Brugmann, Sommer, and others; see § 46. 5. end.

Appulus, Appulia: \bar{A} Marx. *Āpulus, Āpulia* are the better spelling.

aprugnus: \bar{u} acc. to many; see § 38.

arca: this word occurs with the *apex* (ÁRCAE) in Boissieu, *Inscriptions de Lyon*, p. 279, but it is doubtful whether this single instance justifies our recognizing the *a* as long. The root *arc-*, 'hold, confine,' had originally a short vowel, as is shown by *coerceō* (for **co-arceō*); **ārceō* would have retained the \bar{a} in composition; see § 72. Nevertheless it is undeniable that a tendency existed in certain localities to lengthen the short vowel before *r* + a consonant. In some words this resulted in permanent lengthening of short vowels in the classical speech, e.g. in *fōrma*, *quārtus* (cf. *quat-tuor*), *ōrca*, and probably in *ōrdō*, *ōrdior*, *ōrnō*. In case of other words we simply meet isolated local manifestations of the tendency, e.g. in ÁRVÁLI, CIL. vi. 913; LIBÉRTIS, CIL. x. 3523; SÉRVILIO, Henzen, 6490; VIRGO, CIL. vi. 2150; VIRTUTIS, CIL. vi. 449;

CÓRVINVS, vi. 2041; ÓRFITO, vi. 353; CórdIAE, vi. 22,915; NÁRBONE, xii. 3203; NÁRBONÉNSIS, xii. 3163; HÓRT[OS, vi. 9493; COHÓRT-[IS, vi. 2993; FÓRT[IS FÓRTVNAE, vi. 9493; FÓRTVNATA, vi. 7527. Yet these sporadic inscriptional markings hardly justify our assuming *ārvum*, *ārvālis*, *libértus*, *sérvus*, *vīrgō*, etc., for the classical speech; and the same applies to *arca*. See Seelmann, *Aussprache des Latein*, p. 91.

Arrūns: \bar{A} Marx; see § 88. 1.

arvum, arvālis: see *arca*.

ascendō, ascribō, etc.: \bar{a} Marx; see § 48.

ascia: \bar{a} Marx; see § 89.

Asclēpiadēs: \bar{A} Marx.

Asculum: \bar{A} Marx.

aspiciō, -ere, -exī, ectus: $\bar{e}xī$ Marx and Lewis; see above under *alliciō*.

assus: \bar{a} Marx and Lewis, as if for **ārsus*, which is improbable. See Osthoﬀ, *Geschichte des Perfects*, p. 545.

astus, astūtus: \bar{a} Marx, as if for **ax-tus*, etc.; see § 89.

axis: \bar{u} Marx, without warrant; Charisius (Keil, i. 11. 22) and Diomedes (Keil, i. 428) both testify to a short *a*.

balbutiō: \bar{u} Marx; see § 88. 1.

barritus: \bar{a} Marx; see § 88. 1.

benignus: \bar{i} Marx and others; see § 38.

benignitās: \bar{i} Marx and others; see § 38.

bēs, bessis: \bar{e} in oblique cases Marx; but in view of Quintilian's statement (i. 7. 20) that *ss* was not written after a long vowel in the

post-Ciceronian period, it is much more probable that the word followed the analogy of *as, assis*. Osthoff, *Geschichte des Perfects*, p. 545. *braccæ*: *ā* Marx; see § 88. 1.

caballus: *ā* Marx, as if a diminutive from an assumed **cabānus*, for which there is no warrant.

Camillus: *ī* acc. to *Appendix Probi* (Keil, iv. p. 197); *i* acc. to *Martianus Capella* (p. 66. 4, ed. Eysenhardt).

capessō: *ē* acc. to Osthoff (*Geschichte des Perfects*, p. 221), who regards *capessō, facessō, lacessō*, as originally aorists of the same type as *habēssō, licēssit*, etc. Brugmann (*Grundriss*, ii. p. 1203), taking a different view of the formation, regards the *e* as short.

carduus: possibly *ā*, if from the same root as *cār-ex*, 'sedge' (lit. 'rough plant'?).

carrus, carrūca: *ā* Marx; see § 88. 1.

Cassandra: *Cāss-* Marx; see § 88. 1.

cingō, -ere, cīnxī, cīnctus: Lewis (E.L.D.) regards the *i* as short in *cīnxī*; likewise in *-stinxī, -stinctus; tinxī, tinctus*, and in *pinxī, finxī*. The Romance languages seem to point to *ī* in the Perfect and Perfect Participle of all these words, e.g. Italian *cinsi, cinto; stinsi, stinto; finsi, finto*, etc. Inscriptions, moreover, give EXTINCTOS, CINCTVS. See d'Ovidio in *Gröber's Grundriss*, i. p. 501 f.; Körting, *Wörterbuch*, and Fröhde in *Bezenberger's Beiträge*, xvi. p. 193.

classis: *ā* Marx, on the basis of an assumed etymological connection with *clārus*.

cognātus, cognōmen, cognōscō, and other words beginning with *cogn-*: the *o* here is regarded as long by many; but the evidence is not sufficient to warrant this view; see § 38.

combūrō: *ō* Marx, who explains the verb as for **co-amb-ūrō*; cf. *cōgitō* for **co-agitō*.

cōnfestim: *ē* Marx, after the analogy of *manifēstus*, which latter is somewhat uncertain.

conjungō, conjūnx: *ō* Marx, on the basis of CŌNIVGI, CIL. v. 1066; vi. 9914, which are too improbable to merit acceptance.

cōnspiciō, -ere, -exī, -ectus: *ēxī* Marx and Lewis; see above under *alliciō*.

cunctor: *ū* Marx, whose treatment of this word is unintelligible.

damma: *ā* Marx; see § 88. 1.

dēspiciō, -ere, -exī, -ectus: *ēxī* Marx and Lewis (E.L.D.); see under *alliciō*.

dignus: *ī* Marx and others; see § 38.

discidium, discribō, distō, distinguō, dstringō: *dis-* Marx and Lewis (E.L.D.); see § 48.

discō: *ī* Marx, on the theory of compensatory lengthening (*discō* for **di-dc-scō*); see § 89.

distinguō, -ere, -īnxī, -īnctus: see *cingō*. For *distinguō*, see above under *discidium*.

duumvir: *ū* Marx and Lewis (E.L.D.); see § 42. 1.

Dyrrhachium: *ȳ* Marx, who cites the modern name *Durazzo*.

ēnormis: *ō* Marx and Lewis (E.L.D.); see *norma*.

Erinnys: *ī* Marx; cf. § 88. 1.

extinguō, -ere, -īnxī, -īnctus: see *distinguō*.

fastigium: ā Marx, on the theory of compensatory lengthening; see § 89.

fastus, 'disdain': ā Marx, on the theory of compensatory lengthening; § 89.

festinus, *festinō*: ē Lewis and Marx, on the theory of compensatory lengthening, as though for *fendt*; see § 89.

festuca, *fistuca*: ē and ī Marx, on the theory of compensatory lengthening (see § 89), as though for *ferst*.

fingō, -ere, *fīnxī*, *fictus*: see *cingō*.

flectō, -ere, *flexī*: *flexī* Lewis and Marx; see under *alliciō*.

forsit, *forsitan*: Marx writes *fōrsit* and *fōrsitan* on the basis of the Romance. But Körtling (*Wörterbuch*) interprets the evidence of the Romance as pointing to *ō*.

fortasse, *fortassis*: ā Marx, who cites nothing valid in support.

fragmen: ā Marx and many others; see § 39.

frendō, -ere, *frendū*, *frēsus*, or *fresus*: -ēssus Marx; § 98. 2.

futilis: ū Marx; see § 88. 1.

garriō, *garrulus*: ā Marx, who connects with Gr. γάρῳ; see § 88. 1.

Garumna: ū Marx on the basis of Gr. Γαρούνας; but the Romance (Fr. *Garonne*) points to *ū*.

gignō: ī acc. to Marx and many others; see § 38.

gluttiō, *gluttus*: ū Marx; see § 88. 1.

grallae: ā Marx; see § 88. 1.

hallūcinor: ā Marx; see § 88. 1.

helluō: ē Marx; see § 88. 1.

hircus: the quantity of the *i* is doubtful, as the Romance words upon which judgment is based may be

'semi-literary'; see § 36. 5 fin. Cf. Gröber (*Archiv*, iii. 139); Körtling (*Wörterbuch*). Marx compares *hīrtus*, with which *hircus* may be related.

hispidus: ī Marx and Lewis. Marx cites the Romance, but the word is probably 'literary' in the Romance; see § 36. 5 fin. Körtling (*Wörterbuch*) regards the *i* as short.

ictus: īctus Lewis; but the Romance points to *ī*.

ilignus: ī acc. to Marx and others; see § 38.

immō: īmmō Marx, in view of *īmus* and IMMO, CIL. iii. 774. The Romance points to *ī*.

īnspiciō, -ere, -exī, -ectus: -ēxī Marx and Lewis; see *alliciō*.

jubeō, -ēre, *jussī*, *jussus*: *jūssus* Lewis. The only authority for *ū* in *jussus* is IṽSSVS, CIL. vi. 77. But the *apex* here is entitled to no weight. The same inscription has at least one other error in the use of the *apex*, viz. ANNIṽS. In favor of *jūssī* we find IṽSS[IT, CIL. xii. 1930; IṽSSIT, iv. 25531; and IOVSIT, CIL. i. 547 a, et passim in inscriptions of the ante-classical period. The simplest solution of the difficulties is to recognize an ante-classical *jūsī*, which is well attested by Quintilian in i. 7. 21, and a classical *jūssī*. The shortening occurs in accordance with the principle explained in § 88. 1. In view of Quintilian's additional statement that *jussī* was the orthography of his day, and that *ss* was not written after a long vowel (i. 7. 20) this

is almost a necessary conclusion. The *apex* in CIL. xii. 1930 is then a blunder, a result of the confusion of *jūsī* and *jüssī*. See Osthoff, *Geschichte des Perfects*, p. 532 ff.; Brugmann, *Grundriss*, ii. 1182; Fröhde, *Bezenberger's Beiträge*, xvi. p. 184.

Juppiter: *ū* Marx; see § 88. 1.

lascīvus: *ā* Marx, on the basis of an assumed etymology, which connects the word with the root *lās* (*lār*-) of *lārua*.

libertus: *ē* Lewis; see *arca*.

libertās: *ē* Lewis; see *arca*.

lignum: *ī* acc. to Marx and others; see § 38.

littera: *ī* Marx; see § 88. 1.

malīgus: *ī* acc. to Marx and others; see § 38.

Matrona: *ā* Marx, without citation of evidence.

Messalla: *ā* Marx; see § 88. 1.

mingō, -ere, *minxī*, *mictum*: *mīnxī* acc. to Marx and Lewis; see § 46, end.

misceō, *miscēre*, *miscuī*, *mixtus*: *ī* in *mīxtus* acc. to Marx and Lewis. The Romance points to *ī* (Gröber, *Archiv*, iv. 117; Körting, *Wörterbuch*).

mittō, *mittere*, *mīsī*, *missus*: the Romance points to *i*; a few suspicious instances of *i longa* occur, e.g. DIMISSIS, CIL. iii. p. 862 (shown by Osthoff, *Geschichte des Perfects*, p. 526, to be probably a blunder); MISSIONE, x. 7890; REMISSA, xi. 1585.

Narbō, *Narbōnēnsis*: *ā* Marx; see under *arca*.

nesciō, *nescius*: *ē* Lewis; but com-

pare *nequeō*. The Romance points to *e*.

norma: *ō* Lewis and Marx, who connects with Gr. γνῶριμος.

nūncupō: *ū* Marx and Lewis, who connect with *nōmen*.

nūsquā: *u* Lewis; see *ūsquam*.

ostrum: *ō* Marx, who connects with *austrum*.

Paelignus: *ī* acc. to Marx and others; see § 38. Gr. texts accent Παίλινοι.

pannus: *ā* Marx; cf. § 88. 1.

pectō, -ere, *plexī*, *plexus*: *pēxī* Marx, and Lewis; see under *alliciō*.

pelliciō: see *alliciō*.

perspicīō: see *aspiciō*.

pestis: *ē* Marx, in accordance with an untenable theory of compensatory lengthening; see § 89.

pignus: *ī* acc. to Marx and others; see § 38.

pilleus: *ī* Marx; see § 88. 1.

pingō: see *cingō*.

plangō, -ere, *planxī*, *plactus*: *plānxī*, *plānctus* acc. to many; see § 46, end.

plactus: *ā* acc. to many; see § 46, end.

plector, 'be punished': *ē* Marx, who compares πλῆσσω.

posca: *ō* Marx, who compares *pō-culum*; but the root had also a reduced form *pō-* (§ 69); cf. Gr. ποτόν.

poscō: *ō* Marx, on the theory of compensatory lengthening (*pōscō* for **porscō*); see § 89.

postulō: *ō* Marx, as in the case of *poscō*.

prīvignus: *ī* acc. to Marx and others; see § 38.

prōpugnāculum: *ū* acc. to Marx and others; see § 38.

pugna pugnax pugnō pugnus: *ū* acc. to Marx and others; see § 38.

pulmō: *ū* Lewis. The Romance points to *ū*.

quousque: Lewis *u*; see *ū*sque.

respiō, -ere, -exī, -ectus: *-ēxī* Marx and Lewis; see *alliciō*.

Sallustius: *ā* Marx.

sagmen: *ā* Marx and others; see § 39.

salignus: *ī* Marx and others; see § 38.

Sarmātae, Sarmātia: *ā* Marx, who compares the form *Sauromātae*.

sescentī: *sēs-* Marx and Lewis, on the theory of compensatory lengthening; see § 89. Marx compares *Sēstius* (for *Sextius*), but *ē* in that word is exceptional. See Fröhde, *Bezenberger's Beiträge*, xvi. 204.

sordēs: *ō* acc. to Körting (*Wörterbuch*), on the basis of the Romance, but the only word he cites, is Italian *sorde*, which is very likely 'literary'; see § 36, 5, end.

Sphinx: *ī* Marx.

spinter: *ī* Marx.

stannum: *ā* Marx, on the basis of the 'by-form,' *stāgnum*.

stella: *stēla* acc. to the Romance; probably the form with two *l*'s had *ē*.

strenna: *ē* Marx; see § 88. 1.

supparum: *ū* Marx; cf. § 88. 1.

suspiciō, -ere, -exī, -ectus; *suspīrō*: *ū* Marx; see § 48. On *suspexī*, see *alliciō*.

taxō: *ā* Marx.

testa: *ē* Marx, on the theory of compensatory lengthening (*testa* for

**tersta*); see § 89. The Romance points to *e*.

testis, testor, testāmentum, testimoniū, etc.: *ē* Marx, on the theory of compensatory lengthening (*tēstis* for **terstis*); see § 89.

testūdō: *ē* Marx, as in *testa*.

tignum: *ī* acc. to Marx and others; see § 38.

tinguō, -ere, tīnxī, tīnctus: see *cingō*.

torreō, -ere, torruī, tostus: *tōstus* Marx, on the theory of compensatory lengthening (*tōstus* for **tors-tus*); see § 89. The Romance points to *o*. See d'Ovidio in *Gröber's Grundriss*, i. p. 520; Körting (*Wörterbuch*), Gröber (*Archiv*, vi. 129).

tressis: *ē* Marx; see *bēs, bessis*.

Tuscī: *ū* Marx, on the theory of compensatory lengthening (*Tūscī* for **Turscī*); see § 89. The Romance points to *u*.

Tusculum: *ū* Marx; see *Tuscī*.

ultrā, ulterior, ultimus, etc.: *ū* Lewis, on the basis of an alleged *apex* in VLTRA, Boissieu, *Inscriptions de Lyon*, p. 136. But the *apex* does not occur there. See Lindsay, *Latin Language*, p. 595. The Romance points to *u*.

urceus: *ū* Marx, who cites *ōrca*; but the Romance points to *u*.

ūrna: *ū* Marx and Lewis. Marx compares *ūrīnātor*; but *urna* is to be referred to the root *arc-*, weak form *urc-* (§ 100. 2), whence *ur(c)na*. The Italian *urna*, if a genuine Latin inheritance, would point to *ū*; but it is probably purely literary; § 36. 5, fin.

ūrō, -ere, *ussī*, *ūstus*: *ūssī* Lewis; but

Priscian (Keil, i. 466. 6) gives *ūssī*.

See under *jubeō*.

urtica: *ū* Marx and Lewis. Marx compares *ūrō*.

vehō, -ere, *vexī*, *vectus*: *vēxī*, Lewis; see under *alliciō*.

vescus: *ē* Marx, on the basis of the questionable etymology *vē* + *ēscā*.

victor, *victus*, *victōria*, etc.: *ī* Lewis, on the basis of repeated inscrip-
tional markings, such as *VICTOR*,
CIL. vi. 10056; 10115; 1058;
VICTORINVS, vi. 1058; *VICTORIAM*,

vi. 2086; *INVICTAI*, vi. 353. But with a single exception no one of these inscriptions can be shown to antedate the third century A.D.; and I quite agree with Christiansen (*de Apicibus et I longis*, p. 49) in the view that in the classical period the *i* was short; later, apparently, it was lengthened.

vinciō, -īre, *vinxī*, *vinctus*: *vīnxī*,
vīnctus, acc. to Marx and others.

vīscum: *ī* Lewis; but the Romance points to *ī*.

CHAPTER IV.

ACCENT.

See BRUGMANN, *Grundriss*, i², pp. 971 ff.; STOLZ, *Lateinische Grammatik*,³ pp. 98 ff.; *Lateinische Lautlehre*, pp. 95 ff.; SEELMANN, *Aussprache des Latein*, pp. 15 ff.; LINDSAY, *Latin Language*, pp. 148 ff.; SOMMER, *Handbuch der Lateinischen Laut- und Formenlehre*, pp. 94 ff.

54. Accent in general is the prominence of one special syllable of a word as compared with the other syllables of the same word. This prominence may manifest itself in three different ways. Thus :

1. A syllable may be made prominent by 'stressing' it, *i.e.* by uttering it with a more energetic expulsive act on the part of the lungs (*stress accent*). The English and German accent are of this nature.

2. A syllable may be made prominent by uttering it at a higher pitch than the other syllables of the same word (*musical accent*). The Greek and Sanskrit accent were of this kind.

3. A syllable may be *quantitatively* prominent, *i.e.* its time may be greater than that of the other syllables of the same word. No language was ever accented essentially on the quantitative principle alone ; but traces of the operation of this principle are noticeable at one stage of Latin accentuation.

Neither stress accent nor musical accent prevails alone in any language. As a rule the one constitutes the essential accentual principle of a language, while the other is subordinate. Thus in English we notice chiefly the stress accent ; but the rise and fall of pitch also exists as a feature of the spoken language.

55. 1. The character of the Latin accent seems to have varied at different periods of the language. Originally it seems to have been a stress accent. In the prehistoric period this stress accent rested upon the initial syllable of the word. In this respect Latin represents a deviation from the accentuation of the Indo-European parent-speech. In the parent-speech the accent was free, *i.e.* it might rest upon any syllable of a polysyllabic word. Evidences of this prehistoric Latin accent (*i.e.* the stress accent on the initial syllable) are seen in the weakening of unaccented vowels and in the loss of unaccented syllables. Thus :

a) Vowel-weakening : *exerceō* for **éx-arceō* ; *cōnficiō* for **cón-faciō* ; *existumō* for **éxaistumō* ; *inimicus* for **ín-amīcus* ; *contubernālis* for **cóntabernālis* ; *cecīdī* for **cécaidī* (*caedō*) ; *conclūdō* for **cón-claudō* ; *Mānlius* for *Mānilius*.

b) Syllable-loss : *reppulī* for **rè-pepulī* ; *surpuī* for **súr-rapuī* ; *ūn-decim* for **ūno-decem*.

2. In course of time another factor seems to have become operative in Latin accentuation, *viz.* *quantity*. Apparently a long penult came to assume such prominence as to receive a secondary stress. Thus *pépercī* became *pépércī* ; *inimicus* became *ínimīcus* ; *éxistumāmus* became *éxístumāmus*. Where the penult was short, the preceding syllable seems to have received the secondary accent, as *éxístumō* for *éxistumō* ; *cónficiunt* for *cónficiunt*. Ultimately this secondary accent prevailed over the primary initial accent, and thus established the traditional accentuation of the historical period, the so-called 'Three Syllable Law,' by which the accent is restricted to the last three syllables of a word, resting upon the penult if that is long, otherwise upon the antepenult. Yet the first syllable of Latin words seems to have always retained a certain degree of prominence ; for it is regularly retained in Romance, while unaccented syllables in the interior of a word frequently vanish.

3. It has just been stated that in the prehistoric period the

Latin accent was a stress accent. The nature of the accent in the classical period is a matter of controversy. The ablest investigators often differ diametrically in their interpretation of the evidence bearing on this point, most of our leading German philologists still holding that the Latin accent of the Ciceronian age was stressed, while French scholars, on the other hand, are inclined to maintain that it was musical. This latter view has been made extremely probable by the discussion of Vendryes, *Recherches sur l'histoire et les effets de l'intensité initiale en Latin*. Paris, 1902. See also Johnson, in *Transactions American Philological Association*, 1904, pp. 65-76.

Still, even those who advocate the theory of a musical accent for the classical speech, admit that by the fourth and fifth centuries of the Christian era the stress accent had become established.

4. Even were we to admit that the accent of the classical age was a stress accent, it would be clear that the Latin of that time was not as strongly stressed as English and German, for example. One reason for this is found in the accentuation of the Romance languages. These, in the main, retain the Latin accent in its original position, but they generally agree in showing a much slighter degree of stress on the accented syllable than exists in English or German. More weighty is the evidence of Latin poetry. Here the quantitative principle is the fundamental basis of the verse. A decided stress accent would have conflicted with this to the extent of obscuring the metrical character of the verse. Moreover, we often find Latin words containing an unbroken succession of long syllables, e.g. *ēdicēbātur*. A strong stress accent is inconsistent with such conditions, as may be seen from the strongly stressed modern languages. Cf. Eng. *inévitāble* with Latin *inēvitābile*.

5. Attention has been called in the Grammar, § 6, 4, to cases where, by the loss of a final vowel, the accent has come to stand

upon the last syllable of certain words. Other instances of the same sort are *disturbāt* for *disturbāvit*; *mūnīt* for *mūnīvit*. The principle is stated by Priscian (xv. 17-18). *Arpīnās*, *Samnīs*, *nostrās*, *Campāns*, etc., are also cited by the grammarians as having an accent upon the last syllable, as though for *Arpīnātis*, *Samnātis*, *nostrātis*, *Campānus*, etc. See, for example, Priscian iv. 22. Such forms as *benefācit*, *satisfācit*, are properly written *bene facit*, etc.

6. Various Latin grammarians who support the theory of the existence of a musical accent in Latin (*e.g.* Nigidius Figulus, in Gellius, *Noctes Atticae*, xiii. 26. 1-3; *Audacis Excerpta*, Keil, vii. 357. 14 ff.; Priscian, *de Accentu*, 2. 5) recognize an acute (') and a circumflex (^), and lay down specific rules for their employment. According to them, the acute stood upon all short vowels, as *nūx*, *bēne*, *vēterem*, and upon a long vowel in the antepenult, as *rēgibus*. It also stood upon a long vowel of the penult in case the ultima was long, as *rēgēs*. If the ultima was short, a long penult took the circumflex, as *rēge*. The circumflex also stood upon long vowels of monosyllabic words, as *flōs*. But it is more than probable that these rules are merely an echo of the principles of Greek accentuation, just as the rules given for syllable-division by certain Latin grammarians were probably merely a learned fiction in imitation of the Greek rules. See § 35.

CHAPTER V.

ORTHOGRAPHY.

See BRAMBACH, *Die Neugestaltung der Lateinischen Orthographie*, Leipzig, 1868, and the same author's *Hülfsbüchlein für Lateinische Rechtschreibung*, 3d ed., Leipzig, 1884 ; GEORGES, *Lexikon der Lateinischen Wortformen*, Leipzig, 1890.

56. The orthography of Latin words naturally varied at different periods, and even within one and the same period there was not infrequently considerable discrepancy between different writers. During the classical era relatively slight attention was paid to the study of the language, and as a result we notice the absence of any recognized standard of spelling such as prevails in modern languages. This lack of a recognized norm compels us to resort to other sources of information in order to determine the best spelling for a given era. Our manuscripts of the Latin writers unfortunately have been so altered in the course of transmission from the past, that they seldom furnish trustworthy evidence. A few of the oldest give valuable indications of the contemporary spelling ; but more often the Mss. have been adapted to the standards of a later age, and are full of the errors and inconsistencies of the Decline. On the whole, carefully cut official inscriptions furnish the safest reliance. The testimony given by these is supplemented for the post-Augustan era by the statements of grammarians, who, beginning with the first century A.D., devoted much systematic attention to orthographic questions. Many points belonging here have already been anticipated in connection with the discussion of Pronunciation. The following special classes of words call for further consideration :

57. 1. Words of the type mentioned in *Gr.* § 9. 1; 4, viz. **quom**, **volt**, **volnus**, **voltus**, **volgus**; Nouns and Adjectives in **-quos**, **-quom**; **-vos**, **-vom**; **-uos**, **-uom**; and verbs in **-quont**, **-quontur**; **-vont**, **-vontur**; **-uont**, **-uontur**. This was the original spelling and continued to be the regular orthography down to about the beginning of the Augustan Age. After that it was still retained, particularly in special words as an archaic reminiscence. But as a rule, beginning about the 8th century of the city (Brugmann, *Grundriss*, I². § 662; Stolz, *Lat. Gr.* § 46; Lindsay, *Latin Language*, p. 299; Bersu, *Die Gutturalen*, p. 53 ff.), the following changes took place:

a) **vol** + a mute or a nasal became **vul**, e.g. *vultus*, *vulnus*. But proper names show a preference for the early form, e.g. *Volcānus*, *Volscī*, etc.

b) **-vos**, **-vom**, **-vont**, **-vontur** became **-vus**, **-vum**, **-vunt**, **-vuntur**, e.g. *saevus*, *saevum*, *solvunt*, *solvuntur*.

c) **-uos**, **-uom**, **-uont**, **-uontur** became **-uus**, **-uum**, **-uunt**, **-uuntur**, e.g. *perpetuus*, *perpetuum*, *acuunt*, *acuuntur*.

d) **-quos**, **-quom**, **-quont**, **-quontur** developed somewhat at variance with the foregoing classes. They first became **-cus**, **-cum**, **-cunt**, **-cuntur**, yielding, e.g. *ecus* (for *equos*); *cum* (for *quom*); *relincunt* (for *relinquont*); *secuntur* (for *sequontur*).

2. This spelling established itself during the Augustan Age, and continued to be the standard orthography in words of this class until shortly after the close of the first century A.D.,¹ when **-cus**, **-cum**, **-cunt**, **-cuntur** became **-quus**, **-quum**, **-quunt**, **-quuntur**. This change was the result of analogy. Thus in a word like *ecus*, for example, the preponderance of forms containing *qu* (*equī*, *equō*,

¹ Examples are *ANTICVM*, CIL. vi. 615. 4 b); *COCVS*, CIL. vi. 8753 f.; 9264 f.; *PROPINCVS*, CIL. vi. 2408. 3; iii. 5274 a. 2. Cf. *Gr. Προπινκος* CIG. 6430. Manuscripts also preserve numerous traces of such spellings. For examples occurring in the Palatine codex of Virgil's *Aeneid*, see Bersu, p. 88, N.

equīs, etc.) in time naturally produced the change from *ecus* to *equus*; and from *ecum* to *equum*. Similarly, in the verb such forms as *relin cunt*, *secuntur* ultimately became *relinquunt*, *sequuntur* owing to the influence of the forms containing *qu* (*relinquis*, *relinquit*, *relinquimus*; *sequitur*, *sequimur*, etc.).

3. It is interesting to note that the conjunction **cum** remained unaffected by this tendency. Not forming part of a paradigm containing *qu*-forms, it remained intact. Its association and frequent collocation with *tum* also tended to preserve its form unchanged. The form *quum*, though occasionally found still in texts, does not appear in Latin inscriptions or Mss. prior to the 6th century A.D. (Bersu, *Die Gutturalen*, p. 44 N.).

4. What has been said of forms in original -*quont*, -*quontur*, applies similarly to forms in original -(n)*guont*, -(n)*guontur*. Thus an *exstinguont* became first *exstingunt*, then later (after analogy of the other forms of the same tense) *exstinguunt*; so *exstinguontur* developed through the medium of *exstinguntur* to *exstinguuntur*.

58. Assimilation of the Final Consonant of Prepositions in Compounds.¹—

- a) In compounds of **ad**, the preposition appears,—
- 1) Before **c**, regularly as **ac-**, e.g. *accipiō*.
 - 2) Before **f**, regularly as **ad-**, e.g. *adferō*, *adfuī*.
 - 3) Before **g**, regularly as **ad-**, e.g. *adgredior*; but as **ag-** in *aggerō*.
 - 4) Before **l**, regularly as **ad-**, e.g. *adloquor*; but as **al-** in *alligō*, usually in *allātus*, and often in *allēctus*.
 - 5) Before **n**, regularly as **ad-**, e.g. *adnītor*.
 - 6) Before **p**, regularly as **ap-**, e.g. *appellō*; but sometimes as **ad-**, e.g. *adpetō*, *adportō*.

¹ On this topic, see particularly the illuminating paper by Buck in the *Classical Review*, Vol. XIII., pp. 156 ff. Buck's results have materially modified the position taken in the *Appendix* to my *Latin Grammar*.

- 7) Before **r**, regularly as **ad-**, *e.g. adrādō, adrēpō*; but sometimes as **ar-**, *e.g. arripō, arrigō*.
 - 8) Before **s**, regularly as **ad-**, *e.g. adserō, adsistō*; but as **as-** in *assiduus*, and often in *assidō*.
 - 9) Before **t**, regularly as **at-**, *e.g. attineō*; but sometimes as **ad-**, *e.g. adtingō*.
 - 10) Before **q**, regularly as **ad-**, *e.g. adquīrō*.
 - 11) Before **gn, sp, sc, st**, we find sometimes **a-**, sometimes **ad-**, *e.g. agnōscō, adgnōscō; aspirō, adspirō*. Here the spelling *adgn-*, *adsp-*, *etc.*, is purely etymological, and does not indicate the actual utterance; the *d* disappeared in these consonant groups in accordance with the principle explained in § 105. 1.
 - 12) In all other cases **ad** was retained both in spelling and pronunciation.
- b)** In compounds of **com-**, the preposition appears —
- 1) Before **b, p, m**, as **com-**, *e.g. combibō, comportō, commoror*.
 - 2) Before **c, q, g; d, t, n; f, s; j, v**, as **con-**, *e.g. conciliō, conquīrō, congerō; condō, conterō, connāscor; cōnferō, cōnserō; conjungō, convincō*.
 - 3) Before **l**, as **con-** or **col-**, *e.g. conlātus or collātus*.
 - 4) Before **r**, regularly as **cor-**, *e.g. corrumpō, corripō*.
 - 5) Before **gn**, **con-** dropped its **n** (see § 105. 1), *e.g. cognōscō*.
 - 6) For the origin of **cō-** in *cōnūbium, cōniveō, etc.*, see § 89. 1; 3.
- c)** The Preposition **ex** (= **ecs**) before **f**, lost the **c** (§ 105. 1) and then assimilated **s** to **f**, *e.g. efferō*, for *e(c)sferō* (*cf. differō* for **disferō*). Another form sometimes arises by the loss of the **s**, *e.g. ecfērō, ecfātus, etc.* This orthography is found mainly in the archaic period.

d) The Preposition **in** appears, —

- 1) Before **l**, regularly as **in-**, *e.g. inlātus*.
- 2) Before **r**, regularly as **in-**, *e.g. inrumpō*.
- 3) Before **m**, **p**, and **b** as **im-**, *e.g. imbibō; importō; immortalis*.
- 4) In all other cases **in-** was both written and pronounced.

e) The Preposition **ob**

- 1) Is regularly assimilated to **oc-**, **of-**, **og-**, **op-**, before **c**, **f**, **g**, and **p** respectively, *e.g. occurrō, offendō, oggerō, oppōnō*.
- 2) Elsewhere the **b** is regularly retained in writing and in pronunciation, except that before **s** and **t**, **b** had the sound of **p**. See § 27. Our Mss. of Plautus, Terence, and Lucretius often have **op-** in this situation; but Quintilian (i. 7. 7) assures us that for his time good usage demanded **ob**.

f) The Preposition **per** sometimes appears as **pel** before **l**, *e.g. pelliciō*. Elsewhere **r** is retained; *pējerō* probably does not contain the preposition **per**.

g) The Preposition **sub**

- 1) Is regularly changed to **suc-**, **suf-**, **sug-**, **sup-** before **c**, **f**, **g**, and **p** respectively, *e.g. succurrō, suffectus, suggestus, supplex*.
- 2) Before **m**, appears regularly as **sum-**, *e.g. summoveō*.

h) The Preposition **trāns**

- 1) Is regularly retained before vowels and **b**, **c**, **f**, **g**, **p**, **r**, **t**, **v**, *e.g. trānseō, trānsferō, trānsportō, trānsversus*.
- 2) Becomes **trān-**, often before **s**, and always before **sc-**, *e.g. trān-serō, trān-scribō*.
- 3) Becomes **trā-**, before **j**, **d**, **l**, **m**, **n** (§ 105. 2), *e.g. trāciō, trādūcō, trānō*. Yet before these sounds **trāns-** is often restored by re-composition (§ 87. 3).

59. Seelmann (*Aussprache des Latein*, p. 61 f.) thinks that such spellings as *adf-*, *adr-*, *ads-*, *inl-*, *inr-*, in the prepositional compounds above considered, indicated the actual pronunciation. This pronunciation, however, he considers to have been a faulty one, emanating from half educated persons striving for special correctness. Terentius Scaurus, Priscian, and *Appendix Probi* all expressly declare the etymological spelling to be incorrect in the type of words under discussion. In accordance with this, in the *Appendix* to my *Latin Grammar*, the etymological spelling was rejected and the assimilated spelling was recommended as representing the actual speech of the Romans of the best period. The investigations of Buck no longer authorize those conclusions, — at least not as a thoroughgoing principle. In many compounds, the assimilated form is practically unknown in the best period of the language. In others it is regular. In yet others it occurs occasionally. But in all cases the orthography is probably to be regarded as indicating the actual pronunciation.¹

60. Compounds of *jacio*. As indicated in *Gr.* § 9. 3, these are better written *iniciō*, *abiciō*, etc. That a *j* was pronounced after the preposition, is made probable by the fact that the first syllable of these words is commonly used as long in verse. Possibly the analogy of *ēiciō*, *dēiciō*, *rēiciō* (where a *j* would naturally be pronounced, even if not written) led to the omission of *j* in other compounds also. For further discussion of the compounds of *jacio*, see Mather, *Harvard Studies*, Vol. VI, pp. 53 ff.; Exon, *Hermathena*, Vol. XIII, pp. 129 ff.

¹ In the *Appendix* to my *Latin Grammar* it was suggested that even in the case of unassimilated spellings (*adf- ads-, adg-, etc.*) there was assimilation in pronunciation; i.e. that *adf-* was pronounced *aff-*; *ads-, ass-, etc.*

61. LIST OF THE MOST IMPORTANT WORDS OF DOUBTFUL OR VARIED SPELLING.¹

A.

abiciō: rather than *abjiciō*; § 60.

ad in composition: § 58.

adiciō: rather than *adjiciō*; § 60.

adolēscēns: see *adulēscēns*.

Adria: see *Hadria*.

adulēscēns: Brambach (*Neugestaltung*, p. 52) restricts this spelling to the noun, 'young man,' and for the participle of *adolēscō* writes *adolēscēns*.

adulēscēntia, *adulēscēntulus*: like *adulēscēns*.

Aeduī: see *Haeduī*.

aēneus, *aēnus*: better than *ahēneus*, *ahēnus*.

agnōscō and *adgnōscō*: § 58. a).

Alexandrēa: this is the correct form for the Ciceronian period. Later *Alexandriā* is found.

aliōquī and *aliōquū*.

allium: early *ālium*; § 88. 1.

allec: not *ālec*.

ancora: not *anchora*; § 31. 3.

antemna: also *antenna*.

Antiochēa, *Antiochiā*: like *Alexandrēa*, *Alexandriā*.

ānulus: not *annulus*.

Apennīnus and *Appennīnus*.

Apuleius and *Appuleius*: cf. § 88. 1.

Apulia, *Āpulus*.

arbor: *arbōs* is archaic and poetic.

arcessō: in early Latin also *accersō*.

Arēopagīta and *Ariōpagīta*.

Arēus pagus and *Arius pagus*; cf. *Alexandrēa*.

artus, *artāre*: not *arctus*, *arctāre*.

arundō: not *harundō*.

auctor: not *autor*.

auctōritās: not *autōritās*.

aurichalcum: better than *ōrichalcum*.

autumnus: not *auctumnus*.

B.

bacca: early *bāca*; § 88. 1.

balbūtīō: not *balbuttiō*.

ballista: preferable to *balista*.

balneum, *balneae*: *balineum* occurs in early Latin.

bēlua: also early Latin, *bēllua*.

beneficium: rather than *benificium*.

beneficus: rather than *benificus*.

benevolentia: rather than *benivolentia*.

benevolus: rather than *benivulus*.

bibliothēca: *hybliothēca* also occurs.

bipartītus and *bipertītus*: § 87. 1.

Bosphorus: § 31. 3 fin.

bracchium: *brāchium* also occurs.

Britannia, etc.: better than *Britt*.

Brundisium: not *Brundusium*.

C.

caecus: not *coecus*; § 11.

caelebs: not *coelebs*; § 11.

¹ This list in the main follows that given in Brambach's *Hülfsbüchlein für Lateinische Rechtschreibung*, a book unfortunately much antiquated. The whole subject of Latin orthography calls for new treatment. The standard followed in this list is the usage of the early Empire, — roughly speaking, the first century A.D. The correct form is given first. Words belonging to the classes treated in §§ 57–60 are, for the most part, omitted from the list.

caelum and derivatives have *ae*, not *oe*-; § 11.

caementum: not *cōmentum*; § 10. 2.

caenum: see *coenum*.

caerimōnia and *caeremōnia*: not *cērimōnia*; § 10. 2.

caespes: not *cēspes*; § 10. 2.

caestus: not *cēstus*; § 10. 2.

caetra: not *cētra*; § 10. 2.

Camēna: not *Camoena*; § 11.

causa: *caussa* was the pre-Augustan form; § 98. 2.

cēna: not *coena*; § 11.

Cereālis and *Ceriālis*; *Ceriālia*.

cēterī: not *caeterī*; § 10. 2.

Cethēgus: *Cetēgus* is pre-Ciceronian; § 31. 3.

circumeō and *circueō*.

claudō: *clūdō* is rare and the result of 'De-composition'; see § 87. 2.

clipeus: better than *clupeus*, the early spelling; § 6. 2.

Clytēmēstra: not *Clytemnēstra*.

coctea and *cochlea*; § 31. 3.

coenum: this (and not *caenum*) is probably the correct spelling.

com- in composition: § 58. *b*).

cōmissārī and *cōmisārī*.

comminus: not *cōminus*.

comprehendō: better than *comprēndō*.

con- in compounds: § 58. *b*).

condiciō (*con* and root *dic-*): not *conditiō*.

cōnectō and derivatives: not *connectō*, etc.

coniciō: rather than *conjiciō*; § 60.

A form *coiciō* also occurs.

cōnītor: not *connītor*.

cōnīveō: not *connīveō*.

conjūnx: better than *conjux*.

cōntiō (for *coventiō*): not *cōnciō*; § 25. 3.

cōnūbium: not *connūbium*; § 89. 1.

conviciū: not *convitium*; § 25. 3.

cotidiē and *cotidiē*: not *quotidiē*.

cothurnus and *coturnus*: § 31. 3.

culleus, *culleum*: early *cūleus*, *cūleum*; § 88. 1.

cum: archaic *quom*; never *quum*; see § 57. 3.

cumba: also *cymba*.

cupressus: not *cypressus*.

cūr: *quōr* is ante-classical.

D.

damma: early *dāma*; § 88. 1.

Dānuvius: not *Dānubius*. Cf. § 16. 2.

Dārēus: better than the later form *Dārīus*.

Decelēa: better than the later form *Decelia*.

dēfatīgō, *dēfatīgātiō*: also *dēfet-*.

dēiciō: rather than *dējiciō*; see § 60.

dēlēctus, 'choosing'; also *dilēctus*.

dēlēniō: better than *dēliniō*; cf. § 90.

dēprehendō: also the contracted form *dēprēndō*.

dērigō: also *dīrigō*, which is probably the original form. Brambach, however, recognizes two independent verbs: *dērigō* (*dē* + *regō*), 'to move in a particular direction, and *dīrigō* (*dis* + *regō*), 'to move in different directions.'

dētrecto: also *dētractō*; § 87. 1.

dexter, *dextra*, *dextrum*: also *dextera*, *dexterum*; regularly *dextera* when used as a substantive.

diciō: not *ditiō*; § 25. 3.

dīnōscō: earlier *dignōscō*.

disiciō: rather than *disjiciō*; § 60.

Duilius or *Duillius*.

dumtaxat: not *duntaxat*; § 87. 1.

dīpondius: earlier *dupondius*; § 6. 2.

E.

eculus : cf. § 57. d).

ēiciō : rather than *ējiciō* ; § 60.

elleborus : better than *helleborus*.

epistula : rather than *epistola*.

Erīnys : not *Erinnys*.

erus, *era*, *erilis* : not *herus*, etc. ;

§ 23.

Ēsquiliae, *Ēsquilius* : not *Exquiliae*, etc.

Euander : not *Evander*.

exedra and *exhedra*.

exīstīmātiō, *exīstīmō* : *exīstumātiō*, *exīstumō* are the early spelling ;

§ 6. 2.

exsanguis, *exscindō*, *exscribō*, *exsilium*, *exspectō*, and other compounds of *ex* with words having initials : better than *exanguis*, *excindō*, *expectō*, etc.

F.

faenerātor, *faenerō* : not *fēnerātor*, etc. ; § 10. 2.

faenum : not *fēnum*, nor *foenum* ; § 11.

faenus : see *faenerātor*.

fēcundus, etc. : not *foecundus*, etc., § 11.

fēmīna : not *foemīna* ; § 11.

fētus : not *foetus* ; § 11.

fīnitimus : earlier *-umus* ; § 6. 2.

foetidus : not *fētidus* ; § 11.

forēnsia and *forēsia* : § 20. 2.

futilis : early *fūtilis* ; § 88. 1.

G.

gaesum : not *gēsūm* ; § 10. 2.

garrulus : not *gārulus*.

Genēva : acc. to the evidence of the Romance (see Gröber in Wölfflin's *Archiv*, ii. 437) ; but the best Mss.

of Caesar, and the Celtic point to *Genāva*.

genetivus : not *genitivus*.

genetrix : not *genitrix*.

glæba : not *glēba*.

gnātus, *gnāta* : this is the early form, used also in poetry ; later *nātus*, *nāta*.

grātis and *grātiis*. The latter form is archaic.

H.

Hadria, etc. : not *Adria*, etc. ; § 23.

Haeduī : rather than *Aeduī*.

Halicarnāsus : not *Halicarnassus*.

hallūcinor better than *hālūcinor* ; cf.

§ 88. 1 ; also *āl-*, *all-* ; § 23.

Hammōn : better than *Ammōn* ; § 23.

harēna : not *arēna* ; § 23.

haruspex : rather than *aruspex* ; § 23.

haud : sometimes *haut* ; § 28.

haveō and *aveō* ; § 23.

hedera : not *edera* ; § 23.

helluō, *helluātiō* : early *hēluō*, etc. ; § 88. 1.

Henna : better than *Enna* ; § 23.

Hēraclēa : later *Hēraclīa*.

herāscō and *ercāscō* : § 23.

herī : also *here* (a different formation).

Hiber, *Hibērēs*, etc. : not *Iber*, etc. ; § 23.

hiems : possibly also *hiemps*.

Hilōtae : not *Hēlōtae*.

Hister : better than *Ister* ; § 23.

holitor, *holitōrium* : see *holus*.

holus : rather than *olus* ; § 23.

I.

imb- in compounds : § 58. d) 3).

imm- in compounds : § 58. d) 3).

immō : not *īmō*.

imp- in compounds : § 58. d) 3).

inclitus and *inclutus*: not *inclytus*.
incohō and *inchoō*.

ingrātīs and *ingrātīs*: cf. *grātīs*.

iniciō: rather than *injiciō*; § 60.

inl- in compounds: § 58. d) 1).

in primis, or *imprimis*: § 58. d) 3).

inr- in compounds: § 58. d) 2).

intellegentia, *intellegō*: see § 87. 1.

intimus: earlier *intumus*; § 6. 2.

J.

jūcundus: not *jōcundus*, since the word is derived from *juvō*, 'please'; the form *jōcundus* is the result of false association with *jocus*, 'jest.'

Jūdaea: not *Jūdēa*; § 10. 2.

jūniperus: not *jūnipirus*.

Juppiter: the regular classical form.

Jūpiter was the early spelling;

§ 88. 1.

K.

Kaesō and *Caesō*.

Kalendae: better than *Calendae*.

kalumnia: in legal expressions for *calumnia*.

Karthāgō and *Carthāgō*.

L.

lacrima: earlier *lacruma* (archaic *dacruma*); § 6. 2; not *lachrima* nor *lachryma*; § 31. 3.

lagoena: not *lagēna*; § 11.

lāmīna and *lammina*, also syncopated *lāmna*.

lanterna: better than *laterna*.

Lārentia (in *Acca L.*): not *Laurentia*.

lautus: better than *lōtus*.

lēgitimus: earlier *lēgitumus*; § 6. 2.

libel, *libēns*, *libidō*: earlier *lubet*, etc.;

§ 6. 2.

līs: but *stlīs* in the legal phrase *stlītibus jūdīcandīs*; § 104. 1. b).

littera: better than *lītera*; § 88. 1.

lītus: rather than *littus*.

loquēla: not *loquella*.

M.

maereō, *maestus*, etc.: not *moereō*, etc.; § 11.

malevolentia: not *malivolentia*.

malevolus: not *malivolus*.

mancipium: earlier *mancupium*; § 6. 2.

manifēstus: earlier *manufēstus*; § 6. 2.

manipretium: earlier *manupretium*; § 6. 2.

maritimus: earlier *maritumus*; § 6. 2.

Mauretānia: also *Mauritānia*.

maximus: earlier *maxumus*; § 6. 2.

Megalēnsia and *Megalēsia*; § 20. 2.

mercēnnārius: not *mercēnārius*.

Messalla: early *Messāla*; § 88. 1.

mille: plural *millia* (*Monumentum Ancyranum*) and *mīlia* (the usual form).

minimus: also *minumus*; § 6. 2.

monumentum and *monimentum*; § 6. 2.

muccus: earlier *mūcus*; § 88. 1.

multa: not *mulcta*.

multō: see *multa*.

mūraena: not *mūrēna*; § 10. 2.

murra and *myrrha*.

N.

nāvus: earlier *gnāvus*.

nē, 'verily': not *nae*; § 10. 2.

neglēgō, *neglegentia*: § 87. 1.

negōtium, *negōtiātor*: not *negōcium*, etc.; § 25. 3.

nēnia: not *naenia*; § 10. 2.

nēquicquam and *nēquiquam*.

novicius: not *novitius*; § 25. 3.

nunquam and *numquam*.

nūntiō, *nūntius*: not *nūnciō*, etc.;

§ 25. 3.

O.

obicīō: rather than *objicīō*; § 60.

oboediō: not *obēdiō*; § 11.

obscaenus: not *obscaenus*; nor *obscoenus*; § 10. 2; 11.

obs- in compounds: not *ops-*; § 58. e) 2).

obsōnium: also *opsōnium* (ὀψώνιον).

obsōnāre: see *obsōnium*.

obstipescō: earlier *obstupescō*; § 6. 2.

obtemperō, *obtineō*, *obtulī*: not *opt-*; § 58. e) 2).

ōpiliō: better than *ūpiliō*.

opp- in compounds; § 58. e) 1).

optimus: earlier *optumus*; § 6. 2.

Orcus: not *Orchus*; § 31. 3.

P.

paelex: not *pellex*; § 10. 2.

Paelignī: not *Pēlignī*; § 10. 2.

paenitet: not *poenitet*; § 11.

paenula: not *pēnula*; § 10. 2.

Parnāsus; not *Parnassus*.

parricīda, etc.; earlier *pāricīda*; § 88. 1.

Paullus and *Paulus*.

paulus: preferable to *paullus*.

pedetentim and *pedetemptim*.

pedisequus: not *pedissequus*.

pējerō: not *pējūrō*; *pējūrō* is probably a different word.

percontor, etc.: not *percuncor*, etc.

perjūrus and *pējūrus*: cf. *pējerō*.

pessimus: earlier *peessimus*; § 6. 2.

pilleus, etc.: early *pīleus*, etc.; § 88. 1.

plaustrum: not *plōstrum*.

plēbs: not *plēps*; § 58. e) 2).

Polliō: better than *Pōliō*.

pōmērium: not *pōmoerium*.

Pomptinus: not *Pontīnus*.

pontifex: earlier *pontufex*; § 6. 2.

Porsenna and *Porsena*; also, acc. to Brambach, *Porsinna* and *Porsina*.

prehendō and *prēndō*.

prēlum: not *praelum*; § 10. 2.

proelium: not *praelium*; § 11.

prōiciō: rather than *prōjiciō*; § 60.

prōmunturium: better than *prōmon-turium*.

proscenium: not *proscēnium*; § 10. 2.

proximus: earlier *proxumus*; § 6. 2.

Publicola: on the early forms *Popli-cola*, *Puplicola*, see *pūbicus*.

pūbicus (from *pūbēs*, 'youth,' 'able-bodied men,' 'citizens'): *poplicus* (early Latin) is from *poplus* = *populus*; *puplicus* is the result of the contamination of *pūbicus* and *pop-licus*.

pulcher: early Latin *pulcer*; § 31. 3.

Q.

quamquam and *quanquam*.

quattuor: not *quatuor*.

querēla: better than *querella*.

quicumque: better than *quicunque*.

quicquam and *quidquam*.

quicquid and *quidquid*.

Quīnctus, *Quīnctius*, *Quīnctilis*, *Quīnctilius*: these are the forms for the Republican period; under the Empire, *Quīntus*, *Quīntīlis*, etc.

quom: § 57.

quōr: see *cūr*.

quotiēns and *quotiēs*.

R.

raeda: better than *rēda*; not *rh-*; § 10. 2.

Raetia, Raetī: not *Rhaetia*, etc.
recidī (Perf. of *recidō*): not *recidī*.
reciperō: earlier *recuperō*; § 6. 2.
Rēgium: not *Rhēgium*.
rēiciō: rather than *rējiciō*; § 60.
religiō: in poetry also *relligiō*.
reliquiae: in poetry also *relliquiae*.
reliquus: early Latin *relicuos*; § 57.
repperī (Perf. of *reperiō*): not *reperi*.
reppulī (Perf. of *repellō*): not *repulī*.
reprehendō or *reprēndō*.
rēs publica: not *rēspública*.
rettulī (Perf. of *referō*): not *retulī*.
rotundus: in Lucretius sometimes
rutundus; § 90.

S.

saeculum: not *sēculum*; § 10. 2.
saepēs: not *sēpēs*; § 10. 2.
saepiō: see *saepēs*.
saeta: not *sēta*; § 10. 2.
Sallustius: not *Sālustius*.
sāriō: better than *sarriō*.
satura: also later *satira*; not *satyra*.
scaena: not *scēna*; § 10. 2.
sepulcrum: not *sepulchrum*; cf.
 § 31. 3.
sescentī: rather than *sexcentī*.
sētius: not *sēcūs*.
singillātīm: not *singulātīm*.
sōlācium: not *sōlātium*; § 25. 3.
sollemnis: not *sollennis*.
stellīō: early *stēlīō*; § 88. 1.
stillicidium: not *stīlicidium*.
stilus: not *stylus*.
stuppa, etc.: early *stūpa*, etc.; § 88. 1.
suādēla: not *suādella*.
subiciō: rather than *subjiciō*; § 60.
subtemen: not *subtegmēn*.
succ- in compounds: § 58. g) 1).
succus: rather than *sūcus*; § 88. 1.
Suēbī: not *Suēvī*; § 16. 2.

suff- in compounds: § 58. g) 1).
sulpur and *sulphur*: not *sulfur*;
 § 31. 4.
summ- in compounds: § 58. g) 2).
supp- in compounds: § 58. g) 1).
suscēseō: rather than *succēseō*.
suspiciō: not *suspitiō*, § 20. 3.
Syria: earlier *Suria*: § 1. 5.

T.

taeter: not *tēter*; § 10. 2.
tanquam and *tamquam*.
temperī (Adv.): not *temporī*.
tentāre and *temptāre*.
Thalia: *Thalēa* is pre-Augustan.
thēsauros: *thēnsaurus* is archaic.
Thrāx and *Thraex* (Θρᾱξ).
tingō: also *tinguō*.
totiēns: also *totiēs*.
trājectus: not *trānsjectus*; § 58. h) 3).
trāns- in composition: § 58. h).
trānsiciō and *trāiciō*: rather than
trānsjiciō, *trājiciō*; § 60.
trānsnāre and *trānāre*: § 58. h).
Trēverī: rather than *Trēvirī*.
tribūnticius: not *tribūntiūs*: § 25. 3.
tripartītus and *tripertītus*: § 87. 1.
tropaeum and *trophaeum*.
tūs: rather than *thūs*.

U.

ubicumque: better than *ubicunque*.
Ulixēs: not *Ulyssēs*.
umerus: not *humerus*; § 23.
ūmidus, *ūmor*, etc.: not *hūmidus*,
 etc.; § 23.
unguō and *ungō*.
unquam and *umquam*.
urgeō: not *urgueō*.
utcumque: better than *utcunque*.
utrimque: not *utrinque*.

V.

valētūdō : not *valītūdō*.

vehemēns : in poetry often *vēmēns*.

Vergiliae, *Vergilius*, *Verginius* : not *Virg-*.

versus (*versum*) : early Latin *vors-*.

vertex : early Latin *vortex*.

vertō : early Latin *vortō*.

vester : early Latin *voster*.

vīcēsīmus : commoner than *vīgēsīmus* ;
sometimes also *vīcēnsīmus*.

victima : earlier *victuma* : § 6. 2.

vīlicus : not *vīllicus*.

vinculum and *vinclum* : § 91.

vīnolentus and *vīnulentus*.

Volcānus : § 57. a).

Volscā : § 57. a).

Volsiniēnsis : § 57. a).

Volturnus : § 57. a).

Vortumnus : under the Empire also

Vertumnus : cf. *vertō*.

vulgus : earlier *volgus* ; § 57. a).

vulnus : earlier *volnus* ; § 57. a).

vulpēs : earlier *volpēs* ; § 57. a).

vultur : earlier *voltur* ; § 57. a).

vultus : earlier *voltus* ; § 57. a).

CHAPTER VI.

THE LATIN SOUNDS.

THE VOWELS.¹

ABLAUT.

62. 1. The Indo-European parent-speech, from which the Greek, Latin, Sanskrit, Avestan, Slavic, Teutonic, Celtic, Armenian, and Albanian languages are descended, had a vowel system of considerable regularity. By variation of the the root vowel, each monosyllabic root² was regularly capable of appearing in three different forms. Thus the Indo-European root *gen-*, 'bring forth,' had also a form *gon-*, and another form *gn-*. The different phases in which a root appears are designated as 'grades'; while the general phenomenon of variation is called Ablaut or Vowel Gradation. The different phases of a root taken together form an 'ablaut-series.' While ultimate conclusions have not yet been reached on the subject, yet it is usual to recognize six such ablaut-series as belonging to the Indo-European parent-speech. Of the three grades belonging to each series, two are characterized by a fuller vocalism than the third; these fuller phases of the root are called 'strong' grades; the third by contrast is called the 'weak' grade. Thus *gen-* and *gon-*, cited above, represent the strong

¹ See Brugmann, *Grundriss*², Vol. I, §§ 78-549; Lindsay, *Latin Language*, chap. iv; Stolz, *Lateinische Grammatik*³, §§ 4-45; *Lateinische Lautlehre*, pp. 112-229; Sommer, *Handbuch der Lateinischen Laut- und Formenlehre* (pp. 34-336), to which work I am under the greatest obligations for the material here presented.

² While roots are usually monosyllabic, yet some disyllabic roots are also to be recognized.

grades ; **gn-**, which has been weakened by the loss of the **e**, is the weak grade. The first of the two strong grades gives its name to the series in which it occurs.

2. The six Indo-European ablaut-series are as follows :

SERIES.	WEAK GRADE.	STRONG GRADES.	
ā-Series :	{ ə ¹ <i>e.g. bhā-</i>	{ ā <i>e.g. bhā-</i>	ō <i>bhō-</i>
ē-Series :	{ e <i>e.g. dhā-</i>	{ ē <i>e.g. dhē-</i>	ō <i>dhō-</i>
ō-Series :	{ o <i>e.g. pō-</i>	{ ō <i>e.g. pō-</i>	ō <i>pō-</i>
ǣ-Series :	{ Vowel vanishes <i>e.g. g-</i>	{ ǣ <i>ǣg-</i>	ō —
ě-Series :	{ Vowel vanishes <i>e.g. p̥t-</i> <i>dr̥k-</i>	{ ě <i>p̥et-</i> <i>der̥k-</i>	ō <i>p̥ot-</i> <i>dor̥k-</i>
ǫ-Series :	{ Vowel vanishes <i>e.g. —</i>	{ ǫ <i>ǫd-</i>	ō —

3. Of these six ablaut-series, it will be noticed that three are long-vowel series (the *ā-*, *ē-*, and *ō-* series), and three short-vowel series (the *ǣ-*, *ě-*, and *ǫ-* series). But the short-vowel series often have, in addition to the forms given in the foregoing table, so-called 'protracted forms' of the root ; *e.g.* from the root *teg-*, *tōg-* of the *ě-* series comes the 'protracted form' *tēg-* in *tēgula*, 'tile' ; from the root *sed-*, the 'protracted form' *sēd-* in *sēdēs*, 'seat.'

63. The origin of this variation in the form of roots is attributed with great probability to accentual conditions prevailing in the parent-speech. Some uncertainty still prevails concerning details in the various series ; but for practical purposes the above scheme is sufficiently accurate (see Brugmann, *Grundriss*², i. § 534 ff. ; Lindsay, *Latin Language*, p. 253 ff. ; Stolz, *Lat. Gr.*,

¹ **ə** represents an obscure short vowel, which developed variously in the different Indo-European languages, — as *ǣ*, *ě*, *ǝ*, *ō*.

§ 15 ff.; *Lateinische Lautlehre*, p. 157; Johnson's *Cyclopaedia*, Article *Ablaut*). Of the different Indo-European languages some have preserved the Indo-European Ablaut with great fidelity; this is notably the case with Greek and Teutonic. In other languages the Ablaut has become much obscured; Latin belongs to the latter class. Most Latin roots appear in only a single grade, the other two grades having disappeared in the course of the development of the language. Yet some examples of the original gradation are preserved. These will be considered according to the different ablaut-series in which they occur.

Ē-SERIES.

64. The ě-series is by far the best represented of any in Latin; it embraces three sub-types:

a) The ě or ǝ is followed by some consonant which is not a nasal or a liquid, e.g. root *dc-*, *dec-*, *doc-*, seen in *discō* (for **di-dc-scō*); *dec-et*; *doc-eō*; root *sd-*, *sed-*, *sod-*, seen in *sīāō* (for **si-sd-ō*); *sed-eō*; *sod-ālis*, 'seat-mate,' 'table companion,' 'crony.' The root *es-* ('to be') has only the weak grade and one of the strong grades. The weak grade is seen in *s-im*; *s-unt*, etc.; the strong grade in *es-t*; *es-se*, etc.

b) The ě or ǝ is followed by a liquid or nasal. By the loss of the *e* in the weak grade the liquid or nasal often becomes vocalic, developing according to the principles explained in §§ 100, 102. Thus from the Indo-European root *gn-*, *gen-*, *gon-*, the Latin has *gnātus* (for *gñ̥-tus*; see § 102. 2), and *gen-us*; no form with *gon-* has been preserved; *gi-gn-ō*, however, shows us another form of the weak grade. From the root *mn-*, *men-*, *mon-*, the Latin has *mēns* (for **mñ̥-t(i)s*), *meminī* for **me-men-ī*, and *mon-eō*. Compare also *ex-cel-lo*, *col-lis* (root *cel-*, *col-*); *terra*, *ex-torris* (root *ters-*, *tors-*). Occasionally the liquid precedes; e.g. from the root *pr̥c-*, *prec-*, *proc-*, we get *poscō* (for **pr̥c-scō*, **porc-scō*; § 100. 2; 105. 1), *prec or, proc-us*, 'suitor.'

c) The *e* or *o* of the strong grades was originally followed by *i* or *u*; in the weak grade the *e*, as usual, disappeared, leaving *i* or *u*. Thus originally:

<i>i</i>	<i>ei</i>	<i>oi</i>
<i>u</i>	<i>eu</i>	<i>ou</i>

But, of these diphthongs, *ei* became *ī*, while the others became *ū*, except that *oi* (*oe*) has been retained in a few words. Examples: root *fid-*, *feid-*, *foid-*, seen in *fīd-ēs*; *fīdō* (for *feid-ō*); *foed-us* (earlier *foid-us*); root *duc-*, *deuc-*, *douc-*, seen in *dūc-em*, *dūcō* (for earlier **deuc-ō*).

By disappearance of the *ě*, *ǒ* of the strong grades, *ī* sometimes develops from *j* in the weak grade, e.g. *mag-is*, *ma(g)-jes-tās*, *ma(g)jus* (for *-jos*).

For protracted forms of the root in the *ě*-series, see § 62. 3.

Further examples of Ablaut in the *ě*-series are given in Stolz, *Lat. Grammatik*,³ pp. 34 ff.; *Lat. Lautlehre*, pp. 157 ff.; Lindsay, *Lat. Language*, p. 255.

ē-SERIES.

65. No root shows all three grades in Latin; *a*, the obscure vowel, develops regularly as *ā*, but often appears secondarily as *ī* in accordance with § 71. 2. The root *dhā-*, *dhē-*, *dhō-*, 'place,' 'put,' shows the weak grade in *con-dītus* (for **con-dā-tus*; § 71. 2), etc., and one of the strong grades in *sacer-dō-s*; *fānum* (for **fās-num*) shows the weak grade; *fēs-tus*, the corresponding strong grade. Cf. also *rā-tus*, *rē-ri*; *sā-tus*, *sē-men*.

ā-SERIES.

66. One form of the strong grade is seen in *āg-ō*, the 'protracted form' (§ 62.3) in *ambāgēs*. The *a* may combine with *i* to produce the diphthong *ai*. An instance of this is seen in *maes-tus*, weak grade *mis-* in *mis-er*.

ā-SERIES.

67. The obscure vowel *a* develops as *ā*. The weak grade is seen in *fa-teor*; the corresponding strong grade in *fā-rī*, *fāma*. Cf. also *stā-tus*; *stā-men*, *Stātor*; *rād-ere* and *rōd-ere* exhibit the two strong grades.

ō-SERIES.

68. Examples of this scantily represented ablaut-series are *fō-dere*, *ōd-ium*. Of these roots, protracted forms (§ 62. 3) appear in *fōd-ī*, *ōdī*.

ō-SERIES.

69. The obscure vowel *a* appears as *ā*. The weak grade is seen in *dāmus*, *dātus*; the corresponding strong grade in *dōnum*, *dōs*. Cf. also *cā-tus*, *cōs* (for **cōts*).

70. Vowel gradation appears not only in roots, but also in **suffixes** and in **case-endings**. Thus in nouns of the second declension the suffix varies between *e* and *o*, the two strong grades of the *ě*-series. The suffix *e* is seen in the vocative *hort-e*, and originally existed in the locative *hortī*, which is for **hort-e-i*; see § 126. The other cases originally had the suffix *o*, e.g. *hortus*, *hortum*, for a primitive *hort-o-s*, *hort-o-m*. Cf. also nouns of the type of *genus*, *generis*, originally **gen-os*, **gen-es-is*, where again the suffixes *-es*, *-os* show us the two strong grades of the *ě*-series.

In **case-endings** we have an interesting illustration of vowel variation in the genitive ending, which appears as *-s*, *-ēs*, and *-ōs*; e.g. *familiā-s* (§ 113); *ped-is* (for **ped-ēs*); *senatu-ōs* (early Latin).

VOWEL CHANGES.

ā.

71. Indo-European *ā*¹ in syllables which were accented at the time of the early Latin accentuation (see § 55) remains unchanged in Latin; in syllables which were unaccented at that period, *ā* develops as follows:

¹ Including the *ā* arising from Indo-European *a* (§ 62. 2, footnote).

1. Before two consonants (not a mute and a liquid) and before *r* (not final) *ă* regularly becomes *ĕ*, e.g. *acceptus* for **accaptus*; *particeps* for **párticaps*; *cōnfectus* for **cónfactus*; *impertiō* for **impartiō*; *pepercī* for **péparcī*; *reddere* for **reddare*.

2. Before a single consonant in the interior of a word *ă* becomes *ĭ*, e.g. *adigō* for **adagō*; *tetigī* for **tetagī*; *cecidī* for **cecadī*; *concinō* for **concanō*; *īnsitus* for **īnsatus*; *redditus* for **reddatus*.

3. Before *l* + a consonant (but not before *ll*), *ă* becomes *ŭ*, e.g. *exsultō* for **éxsaltō*; *inculcō* for **īncalcō*; *īnsulsus* for **īnsalsus*.

4. Before labials, *ă* becomes the sound which was represented by *u* in the earlier period, and later by *i* (see § 6. 2), e.g. *occupō* for **occapō*; *contubernālis* for **cóntabernālis*; *mancupium* (later *mancipium*) for **māncapium*. But when *i* follows the labial the preceding *ă* appears always as *ĭ*, e.g. *accipio* for **ăccapio*.

5. Before *ng*, *ă* becomes *ĭ* (through the medium of *ĕ*), e.g. *attingō* for **áttangō*; *cōnfringō* for **cōnfrangō*; *compingō* for **cómpangō*.

6. After *ĭ* in open syllables *ă* becomes *ĕ*, e.g. *variegō* for **variagō*; *hiatō* for **hiatō* (cf. *hiāscō*).

7. Short *a* before *l* in open syllables becomes

a) *ŭ*, if the *l* is guttural,¹ e.g. *exsultō* for **exsalō*.

b) *ĭ*, if the *l* is palatal,¹ e.g. *exsilium* for **éxsalium*.

ā.

72. *ā* regularly remains unchanged in Latin in all situations, e.g. *māter*; *contāctus* for **cóntāctus*.

¹ By guttural *l* is meant *l* before *a*, *o*, *u*, or a consonant; by palatal *l*, *l* before *e* or *i*.

ě.

73. 1. ě is regularly retained in Latin :

- a) Before *r*, e.g. *ferō*, *cōnferō*, *sceleris*.
- b) When final, e.g. *horte*, *age*, *agite*.
- c) Usually before two consonants, e.g. *scelestus*, *obsessus*, *auspex*.

2. ě becomes ĭ :

- a) Before a single consonant in syllables which were unaccented by the early accentuation (§ 55), e.g. *colligō* for **collegō*; *militis* for **mīlētēs*; *obsideō* for **ōbsedeō*; *prōtinus* for **prōtenus*. But in unaccented syllables before *r*, the ě is retained, according to § 73. 1. a, e.g. *generis*.
- b) Sometimes before *n* or *m* + a consonant, e.g. *simplex* for **sem-plex* (from *sem-*, 'one'), *vīgintī* for **vīgentī*; *tinguō* for **tenguō*; *quīnque* for **quenque* (earlier **penque*). Before *gn* original ě also becomes ĭ, e.g. *lig-num* for **leg-num*; *dignus* for **deg-nus* (from **dec-nus*; § 94. 3).

3. ě becomes ō before *v*, e.g. *novos* for an original **nevos* (Gr. νέφος).

4. *svě-* becomes first *svo-* and then *so-* (§ 103. 5), e.g. Indo-European **svesor* to **svosor*, whence **sosor*, *soror* (for the change of *s* to *r*, see § 98. 1); **svocrus* to **svocrus*, whence *socrus*, 'mother-in-law.'

5. *e* becomes *o* before guttural *l* (i.e. *l* followed by *a*, *o*, *u* or a consonant, e.g. *olīva* for **elaīva* (Gr. ἐλαίφα); *voluō* for **veluō* (cf. Gr. φελύω).

ē.

74. ē is regularly retained in Latin in all situations, e.g. *rēctus*, *corrēctus*, *corrēxi*, *diē*.

I, ī.

75. 1. In unaccented syllables not final *ī* becomes *ē* before a secondary *r* (§ 98. 1), e.g. *cineris* for **ciniris*, genitive of *cinis*. So also in an accented syllable in *serō* for **si-sō*, **si-rō*.

2. Before a consonant, *ī* develops to *ṛ* (see § 100), then to *er*, e.g. **crīnō* (Gr. κρίνω) becomes first **crnō*, and then *cernō*; so **tris* (Gr. τρίς) became **tr̥s*, later *ter(s)*.

3. Final *ī* becomes *ē*, e.g. *mare* for **mari*; *ante* for **anti* (Gr. ἀντί); *sedile* for **sedīli*; but sometimes final *ī* disappears. e.g. *animal* (for **animālī*); *calcar* (for **calcārī*).

4. Long *ī* regularly remained unchanged in Latin.

ō.

76. 1. *ō* became *ū* in accented syllables :

a) Before *n-adulterinum* (§ 20. 1), e.g. *uncus* for **oncos* (Gr. ὄγκος); *unguis* for **onguis* (cf. Gr. ὄνυξ).

b) Before *l* + a consonant, e.g. *multa* for *molta*; *sulcus* for **solcos* (Gr. ὄλκος); *pulcer* for earlier *polcer*; *culpa* for *colpa*. But this change does not take place before *ll*; hence *collis*, *mollis*.

2. *ō* also regularly becomes *ū* before *m*, e.g. *umbō* for **ombo* (cf. Gr. ὀμφαλός); *numerus* for **nomeros* (cf. Gr. νόμος). A few exceptions (*domus*, etc.) remain unexplained.

3. About 150 B.C. earlier *vor-*, *vos-*, *vot-* became *ver-*, *ves-*, *vet-*, e.g. *versus*, *vertō*, *vertex*, *vester*, *vetō*, for earlier *vorsus*, etc.

4. In unaccented open syllables Indo-European *ō* seems to have become :

a) *ī*, e.g. *novitās* for **nevo-tās*; *armiger* for *armō-ger*; *ī-līcō* for **īn stlocō*, 'on the spot'; *īndigena* for **īndogena*.

b) After *ī* this *ō* became *ē*, e.g. *pietas* for **piō-tās*; *societās* for **sociō-tās*.

c) Before guttural *l* (see § 71. 7, footnote), *ō* became *u*, e.g. *sēdulō* for **sē dolō*.

d) Before labials this *ō* became *u* (later *ī*, see § 6. 2), e.g. *Crassupēs* for **Crassopēs*; *aurufex* for **aurōfex*.

5. In closed syllables, originally unaccented *ō* becomes *u*, e.g. *onustus* for **ónostos*; *euntis* for **éontis* (cf. Gr. *iónros*). So also before a consonant in final syllables, e.g. *filius* for earlier *fīlios*; *dōnum* for **dōnom*; *opus* for **opos*. Final syllables in *-quos*, *-quom*; *-vos*, *-vom*; *-uos*, *-uom*, etc., retained the *ō* to a considerably later period; see § 57. 1. *ō* was also regularly retained before *r*, e.g. *temporis*.

6. Final *ō* became *ē*, e.g. *sequare* for **sequeso*. For the rhotacism, see § 98. 1.

ō.

77. *ō* regularly remains unchanged in Latin in all situations, e.g. *dōnum*, *victōrēs*, *licētō*.

ū.

78. *ū* before labials became *ī* about the close of the Republic (see § 6. 2), e.g. *lacrima* for earlier *lacruma*; *lacibus* for earlier *lacubus*. This change regularly took place in unaccented syllables, but by analogy it affected some accented syllables also, e.g. *libet* for *lubet*; *libēns* for *lubēns*.

ū.

79. *ū* is regularly retained in all situations, e.g. *fūmus*, *conjūntum*, etc.

ai.

80. 1. In syllables which, under the early accentuation (see § 55), were accented, original *ai* was retained, becoming, about 100 B.C., *ae*, which, in turn, late in imperial times, developed into a monophthongal sound; see § 10. 2. But *ai* arose

secondarily in Latin in a few words, e.g. *maior*,¹ *aiō*, *Maius*, etc. pronounced *maijor*, *aijō*, etc.

2. In syllables which, under the early accentuation (§ 55), were *unaccented*, original *ai* became regularly *i*, e.g. *inquirō* for **inquairō*; *existumō* for **éxaistumō*; *virtūtī*, *militī*, etc., for **virtūtai*, etc.; *mēnsīs*, *portīs*, etc., for *mēnsais*, etc.

oi.

In Accented Syllables.

81. 1. *oi* appears in the oldest monuments of the Latin language, e.g. *oinom*. But it early began to take the form *oe*, e.g. *coeravere*. Somewhere between 200 and 100 B.C. it began to develop to *ū*, e.g. *ūtilis* for **oitilis*; *ūnus* for *oinos*; *lūdus* for **loidos*. This change was complete by 100 B.C., though a tendency existed for a long time after that to use the original *oi* in formulas, e.g. *coiraverunt*, *loidos*.

2. Yet *oe* (even after the change of *oe* to *ū*) appears even in a few words:

a) As a result of contraction, e.g. *coetus* for *coitus*; *coepi* for **coēpi*.

b) In the following special words: *poena*, *Poenus*, *coenum*, *foedus*, 'treaty,' *foedus*, 'ugly,' *foetor*. Yet by the side of *poena* we have *pūniō*; by the side of *Poenus*, *Pūnicus*; along with *coenum*,² *cūniō*. Sommer suggests that the law is this: When the labials *p*, *f*, or the labio-velar *qu* began a word, the following *oe* was retained, except when *i* followed.

c) *Moenia* survived as an archaism. The form served to differentiate *moenia* and *mūnia*, which were originally the same word.

¹ This is probably the correct spelling for this class of words, not *māior*, *ājō*, *Mājus*, etc.

² *coenum* is for earlier **quoinom* (§ 103).

d) *oi* in early Latin appears before *j* in *quoi(j)os*; see § 198. 3.

3. After initial *v*, *oi* became *ī*, e.g. *vīcus* for **voicos* (Gr. *φοῖκος*); *vīnum* for **voinom* (Gr. *φοῖνος*).

In Unaccented Syllables.

4. Here *oi*, through the intervening stage of *ei*, became *ī*, e.g. *horti* through *hortei*, from **hortoi* (cf. Gr. *χόρτοι*); *hortis*, through *horteis*, from **hortois* (Gr. *χόρτοις*). Vestiges of the early form are preserved in *poploe* (= *populī*) and *oloes* (= *ollis*, *illīs*), mentioned by Festus.

ei.

82. 1. Indo-European *ei* is preserved in the earliest monuments of the Latin language, e.g. *DEIVOS*, *DEICERENT*. About 200 B.C. it began to pass into *ī*. This circumstance led to the writing of *ei* for original *ī* in some words, e.g. *FAXSEIS*, for *faxīs*; *pēilum* for *pīlum*. In inscriptions the spelling *EI* (both for original *ei* and for *ī*) was commonly current even down to the time of Caesar.

2. After *l*, *ei* became *ē*, e.g. *lēvis* for **leivis* (Gr. *λεῖφος*); *lēvī* for **leivī* (from *linō*).

3. *ei* arose secondarily in some words, e.g. *eius*, *peior*, *Pompeius*, the correct spelling, instead of the traditional *pējor*, *Pompējus*. These were pronounced *eijus*, *peijor*, etc.

ui.

83. This diphthong undergoes no changes; see § 14.

au.

84. 1. *au* is regularly retained in syllables which, under the early accentuation (§ 55), took the accent, e.g. *aūrōra*, *claudō*. In the speech of common life this *au* had a tendency to become an open *ō* (later close), and in some words this colloquial pronunciation even established itself permanently in the literary lan-

guage. Examples are: *Clōdīus* for *Claudius*; *plōdō*, in *explōdō*, *implōdō*, etc.

2. In syllables which, under the early accentuation (§ 55), remained unaccented, *au* regularly became *ū*, e.g. *inclūdō* for **inclaudō*; *dēfrūdō* for **dēsfraudō*.

eu and ou.

85. 1. Primitive Latin *eu* and *ou* are nowhere preserved in the existing monuments of the Latin language. *eu* first became *ou* (seen in early Latin *doucō* for **deucō*), and subsequently developed to *ū*, e.g. *dūcō*, *lūceō*. Original *ou* became *ū* directly.

2. In a few instances we have *eu* arising secondarily, e.g. *neu*, *ceu*, *seu*.

LONG DIPHTHONGS.

86. The name 'long diphthong' is given to diphthongs whose first element consisted of a long vowel. *Āi*, *ōi*, *ēi*, *ēu*, *āu*, *ōu*, existed in the parent-speech. These, so far as they were inherited by the Latin, more commonly shortened the first element, after which they developed according to the principles already laid down for original *ai*, *ei*, *oi*, *au*, *eu*, *ou*, etc. Examples are *hortīs* for **hortōis* (§ 81. 4), from original **hortōis*; dative singular, *portae*, from **portāi* (cf. Gr. *χώρα*); *aurōra*, for **āurōra*; *noctū* for **nocteu*, from **noctēu*. So also probably *diūs* in *nudiūstertius*, *diūs* here being for **dieus*, from original **diēus*. In the dative singular of *ō*-stems, the Indo-European termination was *-ōi* (Gr. *-ω*). In Latin this generally became *-ō*, by loss of the final element of the diphthong, but in our earliest Latin inscription (CIL. xiv. 4123) we have perhaps a dative in *-ōi*, viz. *NVMASIOI*, from *-ōi*.

In the parent-speech, these long diphthongs frequently lost the second element. Thus *ēi*, *ēu* gave *ē*. Traces of this are seen in Latin *fēlō*, for **fēilō*; *rem* (earlier **rēm*) from **rēim*; *diem* (earlier **diēm*) from **diēum*.

RE-COMPOSITION AND DE-COMPOSITION.

87. 1. The principles laid down in the foregoing sections for the change of vowels and diphthongs in the (originally) unaccented syllables of compounds often seem to be violated. Thus *appetō*, *expetō*, *intellegō*, *neglegō* occur where the law demands **appitō*, **expitō*, *negligō*, *intelligō*. These apparent irregularities are in reality not due to any violation of the law, but are the result of 'Re-composition,' i.e. the identity of the simple verb was so keenly felt that the language restored it in the compound, thus replacing the regular **appitō*, *intelligō*, etc., with *appetō*, *intellegō*, etc. Other instances of the same kind are *exaequō*, *conclausus*, *exquaerō*, *revocō*, *collocō*, *interrogō*, where phonetic laws would demand **exīquō*, *conclūsus*, *exquīrō*, **revicō*, **collicō*, **interrigō* (§ 76. 4).

Many compound words are also naturally much later than the operation of the laws above referred to.

2. Sometimes the form taken by a verb in composition occurs instead of the original form, e.g. *clūdō* for *claudō*, after *inclūdō*, etc.; *plicō* for *plecō* after *implicō*, etc. This process may be called 'De-composition.'

3. Re-composition and De-composition manifest themselves not only in connection with vocalic changes, but also in connection with many of the consonantal changes enumerated in the following sections. Cf. e.g. *trānsdūcō* as an illustration of Re-composition. The phonetic form is *trādūcō*, which also occurs. Cf. also *sescentī* (the phonetic form; § 105. 1), but *sexcentī* (Re-composition).

SHORTENING OF LONG VOWELS.

88. 1. A group of some twenty words exhibits shortening of an accented long vowel, with compensatory doubling of the following consonant, viz. *Jūppiter* (for earlier *Jūpiter*), *cuppa*, *littera*, *muccus*, *succus*, *hallūcinārī*, *parricīda*, *bacca*, *gluttus*, *gluttīre*,

bucca, damma, muttire, stuppa, futtilis, Messalla, braccæ, puppa, allium, stelliō, strenna, helluō, culleus, pilleus. Many of these words often appear in Mss., texts, and inscriptions, written with a single consonant; that represents the earlier spelling. The orthography of the Augustan Age has two consonants.

2. The vowel was regularly shortened in final syllables in *m* and *t*; also in the original *-ōr*, *-ār*, and *-ēr* of Passive forms; and in the Nominative endings *-tēr*, *-tōr*, *-sōr*, *-ōr*, *-āl*, *-ār*.

3. Words of original iambic form, e.g. *mīhī, tībī, sībī, mōdō, cītō, cēdō*, often suffered permanent shortening of the ultima, giving *mīhī, tībī, modō, cedō, etc.* The name of 'Breves Breviantes' ('shorts shortening') has been given to this process.

4. In the interior of words a long vowel is often shortened before a vowel, e.g. *pleō, taceō*, from **plēō, *tacēō*; *deorsum* from **dēorsum*; *fideī* from *fidēī*; *reī* from *rēī*; *deesse, deeram* (cf. *dēsum, dēfuī*).

COMPENSATORY LENGTHENING.

89. 1. In accented syllables, an *s* before a voiced consonant is often dropped with lengthening of a preceding short vowel, e.g. *sīdo* for **si-sd-ō*; *querēla* for **quesla*; *egēnus* for **egesnos*. Often the consonantal group contains other consonants before the *s*, which first disappear (in accordance with § 105. 1), e.g. *āla* for **acsla*; *rēmus* for **retsmos*; *scāla* for **scantsla*; *tēmō* for **tensmō*; *cōnūbō* for *co-snūbō* (§ 104. 1. b. 2). This lengthening of the short vowel in compensation, as it were, for an omitted consonant, is designated 'compensatory lengthening.'

2. A short vowel followed by *-ns* at the end of a word is lengthened with disappearance of the *n*, e.g. *equōs* for **equons*.

3. Compensatory lengthening is also claimed by many scholars for those cases in which a long vowel has developed before *nct*, *ncs* (i.e. *nx*), e.g. *jūnctus, jūnxī* (cf. *jūngō*); and where *n* disappears before *c*, e.g. *cōnīvēō* for **con-conīvēō*.

ASSIMILATION OF VOWELS.

90. Vowels are occasionally assimilated to each other in successive syllables, e.g. *nihil* for **nehil*; *nisi* for **nesi*; *sobolēs* for *subolēs*; *rutundus* (chiefly in poetry) for *rotundus*; *tugurium* for **tegurium* (*tegō*); *purpura* for πορφύρα; and in reduplicated perfects, e.g. *momordī* for *memordī*; *totondī* for *tetondī*; *pupugī* for *pēpugī*; etc. Assimilation is mainly restricted to short vowels, but possibly we should recognize the assimilation of a long vowel in *filius*, lit. 'suckling,' for **fēlius*, root *dhēi-* (see § 86); in *suspiciō* for **suspecīō* (protracted form of root *spec-*); *subtilis* for **subtēlis* (*tēla*).

PARASITIC VOWELS.

91. In the immediate environment of a liquid or nasal, a parasitic vowel sometimes develops. Thus, especially in the suffixes *-tlo-*, *-blo-*, *-clo-*, which become *-tulo-*, *-bulo-*, *-culo-*, e.g. in *vitulus*, *stabulum*, *saeculum*; yet the original forms continued in use in the colloquial language and in poetry, e.g. *saeculum*, *vinclum*. Further examples are *famulus* (for **famlos*); *populus* for *poplus* (early Latin); and several words borrowed from the Greek, e.g. *Aesculāpius* (Ἀσκληπιός); *mina* (μνᾶ); *drachuma* (δραχμή).

SYNCOPE.

92. In early Latin a short vowel following an accented syllable was often dropped. Illustrations of this are: *auceps* for **aviceps*; *auspex* for **avispex*; *ārdor* for **āridor*; *reddō* for *re-d(i)dō*; *aetās* for *aevitās*; *prūdēns* for **prōv(i)dēns*; *valdē* for *validē*; *officīna* for **op(i)ficīna*; *anceps* for *amb(i)-ceps*. Syncope in final syllables is seen in *ager* for **agr(o)s*, **agr̄s*, **agr̄*, etc., and *ācer* for *ācris*, **ācr̄s*, **ācr̄*, etc.; see § 100.

APOCOPE.

93. 1. Final *ē* and *ī* often disappear, e.g. *nec* (for *neque*), *ac* (for *atque*), *et* (for **eti*; Gr. *ēti*), *aut* (for **auti*); *quot*, *tot* (for

**quoti*, **toti*; cf. *toti-dem*); *ob* for **obi*; and in neuter *i*-stems e.g. *animal* for **animālī*; *calcar* for **calcārī*. But dissyllabic *ī*-stems change *-ī* to *-ē*, e.g. *mare* for **mari*.

2. Final *ō* disappears in *ab*, for an original **apo* (Gr. ἀπό); and *sub* for **supo* (cf. Gr. ὑπό). On the change of *p* to *b*, see § 96. 1.

THE CONSONANTS.¹

THE MUTES.

The Palatal and Guttural Mutes, *c*, *q*, *g*.

94. 1. There are three series of *k* and *g*-sounds in Indo-European, designated respectively as 'Palatals,' 'Velars,' and 'Labio-Velars.' The Palatals were formed by approximating the tongue to the roof of the mouth. They developed in most languages as *k*, *g* (in Latin regularly as *k* (*c*), *g*, rarely as *q*; in Sanskrit and Slavic as sibilants, *s*, *sh*, etc.). The Velars were formed further back in the throat, and develop in all languages as plain gutturals, *k*, *g*. The Labio-Velars develop with labialization, i.e. they have a parasitic *w*-sound after the *k* or *g*. Latin represents these sounds respectively by *qu* and *gu*.

2. Examples of the different Gutturals are :

Palatals : *centum*, *decem*, *dīcere*, *socer*; *ager*, *agō*, *genū*, *genus*, *argentum*. *qu* for *c* appears in *queror*, *queō*, but never *gu* for *g*.

Velars : *cruor*, *cavēre*, *canere*; *augeō*, *grūs*, *gelū*, *tegō*.

Labio-Velars : *quis*, *quī*, etc.; *sequor*; *-que*; *-līnquō*; *stinguō*, *unguen*. The labial element is sometimes entirely lost so that *qu* appears as *c*, e.g. *stercus* (cf. *sterquilinium*), *socius* (for **soquius*; cf. *sequor*); *arcus* (cf. *arquitenēns*); *-tīctus* (cf. *-līnquō*). When

¹ See in general Brugmann, *Grundriss*², §§ 277-532; Lindsay, *Latin Language*, chap. iv.; Stolz, *Lateinische Grammatik*³, §§ 42-69; *Lateinische Lautlehre*, pp. 232-291; Sommer, *Handbuch der Lateinischen Laut- und Formenlehre*, pp. 169-336.

initial, *gu* (i.e. *gv*) loses the *g* and becomes *v*, e.g. (*g*)*venīre*, (*g*)*vīvos*, (*g*)*vorāre*.

3. -*cn*- and -*cm*- occasionally develop as *gn* and *gm*, e.g. *salignus* from *salix* (root *salic*-); *dignus* for **dec-nus*; *sēgmentum* for **sec-mentum* (*sec-ō*).

The Dental Mutes, *t*, *d*.

95. 1. *t* regularly appears as *t*, but in the Indo-European suffix -*tlo*-, *t* became *c*, e.g. *piāclum* (whence *piāculum*) for **piātlo*m; *saeculum* (*saeculum*) for **saetlo*m; *vinclum*, etc. Sometimes this -*clo*- subsequently (by dissimilation; see § 110) developed to -*cro*-, when a preceding syllable had *l*, e.g. *lavācrum* for **lavāclo*m, **lavātlo*m; in *quadrāgintā*, *quadringentī*, *d* has not developed from *t*; *quadr*- probably represents a different word; see § 183. 13.

2. *d* is regularly retained, but becomes *l* in a few words, e.g. *lacruma* for *dacruma* (preserved in Ennius); *lingua* for early *dingua* (helped perhaps by association in the folk-consciousness with *lingere*, 'lick'); *solium* for **sod-ium* (Ablaut of *sed*-; see § 64. a); *lēvir* for **dēvir* (dialectal(?)) for **laivir*; Gr. δᾱ(ϝ)ήρ).

The Labial Mutes, *p* and *b*.

96. 1. *p* regularly remains unchanged; but in the prepositions *ab*, *ob*, *sub*, *b* has developed from an earlier *p*. The original forms of these words were **apo* (Gr. ἀπό), **op-i* (in Ablaut relation to Gr. ἐπί; cf. § 64. a); **supo* (cf. Gr. ὑπό). By loss of the final vowel these became **ap*, **op*, **sup* (cf. *sup-er*, *suprā*); *ap*- and *op*- are probably to be recognized in *aperiō* and *operiō*; but before voiced consonants the *p* of *ap*, *op*, and *sup* regularly became *b* by partial assimilation, e.g. *ab dūce*, *ob delīcta*, *sub dēcessū*, whence the forms with *b* ultimately became predominant. In *bibō* the initial *b* may be for an original *p* by assimilation; cf. Skr. *pibāmi*. By assimilation also, an original **penque* became *quīn-que*; and **pequō* became first **quequō*, then *coquō*.

2. *b*, as the descendant of Indo-European *b*, is by no means a frequent sound in Latin, particularly initial *b*. Examples are *baculum*, *balbus*, *brevis*; *lūbricus*, *labrum*. On the late development of intervocalic *b* to a spirant, see § 16. 2.

The Indo-European Aspirates in Latin.

97. In the Indo-European parent-speech the aspirates were almost exclusively voiced, *i.e.* *bh*, *dh*, *gh* (both palatal, velar, and labio-velar); *ph*, *th*, *ch* were extremely rare. These voiced aspirates developed in Latin as follows:

1. Indo-European *bh* became:

- a) *f* at the beginning of words, *e.g.* *fāgus* (for **bhāgos*; Gr. φηγός); *fā-rī* (root *bhā-*; Gr. φημί); *fu-ī* (root *bhu-*; Gr. φύω); *fer-ō* (root *bher-*; Gr. φέρω).
- b) *b* in the interior of words, *e.g.* *ambō* (for **ambhō*; Gr. ἄμφω); *orbis* (root *orbh-*; Gr. ὀρφάνος); *mor-bus* (suffix *-bho-*).

2. Indo-European *dh* became:

- a) *f* at the beginning of words, *e.g.* *fūmus* (for **dhūmos*; Gr. θυμός); *fēmina* (root *dhēi-*; Gr. θήλυς); *forum* (root *dhor-*).
- b) Usually *d* in the interior of words, *e.g.* *medius* (for **medhios*; *cf.* Gr. μέσσος for **μεθίος*); *aedēs*, 'fire-place,' 'hearth' (root *aidh-*; Gr. αἶθω, 'burn'); *viduus* (root *vidh-*); but
- c) *b* in the interior of words, if an envioning syllable contains *r*, *e.g.* *ūber* (root *oudh-*; Gr. οὐθαρ); *rubro-* (root *rudhro-*; Gr. ἐρυθρός); and in the suffixes *-bro-* (for *-dhro-*; Gr. -θρο-), *e.g.* *crī-brum*. Similarly before *l* in the Indo-European suffix *-dhlo-* (Gr. -θλο-), *dh* becomes *b*, *e.g.* *stabulum* (with *-bulum* for *-blum*; see § 91).

3. Indo-European *gh*. Here we must distinguish palatal, velar, and labio-velar *gh*.

A. *Palatal gh*. This became :

- a) *h*, when initial or between vowels in the interior of words, e.g. *hiems* (root *ghim-*; Gr. χεῖμὼν); *holus* (root *ghol-*); *vehō* (root *vegh-*); *ānser* (root *ghāns-*) has lost the initial *h*; see § 23.
- b) *g* before and after consonants e.g. *fingō* (root *dheigh-*, with the infix *n*); *grāmen* (root *ghrā-*).
- c) *f* before *u*, e.g. *fu-ndō* (root *gheu-*).

B. *Velar gh*.

- a) Velar *gh* becomes regularly *h*, but *g* before *r*, e.g. *hostis* (for **ghostis*); *pre-hendō* (root *ghend-*); *gradior* (for **ghrad-*).

C. Labio-velar *gh* becomes,—

- 1) *f*, when initial, e.g. *formus* (for **ghormos*).
- 2) *gu* after *n*, e.g. *ninguit* (root *(s)nigh-*, with infix *n*).
- 3) *v* between vowels, e.g. *nivis*, *nivī*, etc. (root *snigh-*).

THE SPIRANTS, *s*, *f*, *h*.

98. 1. *s* is the most important of the spirants, as regards phonetic changes. An original *s* regularly became *r* between vowels ('*Rhotacism*'), e.g. *ger-ō* for **ges-ō* (cf. *ges-sī*, *ges-tus*); *dirimō* for **dis-emō* (cf. *distinguō*); *temporis* for **tempos-is* (cf. *tempus*); *portārum* for **portāsom*. This change took place within the historical period of the language. It had been consummated before the close of the fourth century B.C. But the grammarians retained the tradition of the earlier forms, and often cite such words as *arbosem*, *pignosa*, etc. This change of *s* to *r* sometimes seems to occur before *v*, e.g. *lārva* (root *las-*). But

this is only apparent; *v* in such cases is secondary, having developed from *u*, so that the rhotacism is regular: *lār-u-a* (for **lās-u-a*); cf. *Lar-ēs* (for *Lasēs*); *fur-u-os* (for **fus-u-os*; cf. *fus-cus*); *Mener-u-a* (for **Menes-u-a*); *lā-ru-a* and *Mine-ru-a* are both found in Plautus.

2. Wherever *s* appears between vowels in the classical language it is usually a result of the reduction of *ss* after a long vowel or a diphthong, e.g. *mīsī* for *mīssī* (i.e. **mīt-sī*); *suāsī* for *suāssī* (i.e. **suādsī*); *haesī* (for *haes-sī*); *causa* for *caussa*.

The forms with double *ss* were current in Cicero's day (cf. Quintilian, i. 7. 20), and occur occasionally in inscriptions much later; after short vowels *ss* was, of course, always retained, e.g. *fissus*, *scissus*, etc.

3. In a few cases intervocalic *s* appears to have resisted rhotacism, e.g. *basium*, *miser*, *caesariēs*. Possibly the *s* was retained in *miser* and *caesariēs* as a result of dissimilation (§ 110), i.e. in order to avoid **mirer*, **caerariēs*.

4. By analogy, the *r* resulting from rhotacism sometimes crept into the Nominative from the oblique cases, e.g. *honor* (originally *honōs*) after *honōris*, *honōrī* (originally **honōsis*, etc.).

5. Compounds, of course, often show intervocalic *s* after the analogy of the simple words of which they are compounded, e.g. *nisi*, *quasi*, *positus* (after *situs*), *dēsiliō*, *dēsiniō*, etc.

6. For the omission of the spirant *h*, see § 23.

THE LIQUIDS, *l*, *r*.

The Liquids as Consonants.

99. 1. As consonants, the Latin liquids exhibit few peculiarities. Their most important feature is a tendency toward dissimilation, as a result of which *l* changes to *r*, or *r* to *l*, to avoid the repetition of *l* or *r* in successive syllables. Examples are seen in the suffixes, *-āri-*, *-cro-* for *-ālī-*, *-clo-* (from *-tlo-*; see § 95. 1),

e.g. exemplāris (to avoid **exemplālis*); *lucrum* (to avoid **luclum*). So *caeruleus* is for **caeluleus* (*caelum*), 'sky-blue.' Sometimes *r* disappears as a result of the tendency to avoid two *r*'s in successive syllables, *e.g. praestigiae* for *praestrigiae* (*praestringō*); *sempiternus* for **sempe(r)-ternus*.

The Liquids as Sonants.

100. In the Indo-European parent-speech, whenever roots which, in their strong grades, contained *el*, *ol*, *er*, *or*, became reduced to the weak grade (see § 64. *b*), the *l* or *r* (by the disappearance of the *e* or *o*) became sonant, *i.e.* endowed with vocalic character, usually indicated by *l̥*, *r̥*. English has these sounds in *botl̥* (written *bottle*); *centr̥* (written *centre*), *etc.* These Indo-European sonant liquids developed in Latin as follows:

1. *l̥* developed regularly as *ol*, which often became *ul* (§ 76. 1, *b*), *e.g. tollō*, *i.e. *tol-nō* (for **tl̥-nō*, root *tel-*); *pulsus* (for an Indo-Eur. **pl̥-tōs*; root *pel-*); *-cultus* in *oc-cultus* (for an Indo-Eur. **cl̥-tōs*; root *cel-*). Before vowels, *l̥* developed as *al*, *e.g. palea* for **pl̥-ea*.

Sometimes the sonant *l* was long in quantity and then developed as *lā* or *al*, *e.g. lāna* (*i.e. *vlāna*) for **vl̥-nā*, from root *vel-*; *cf. vel-lus*; *lātus* (*i.e. *tlātus*; § 104. 1 *a*), from root *tel-*; *falx* (for **fl̥x*; root *flec-*, in *flec-tō*), 'the curving tool.'

2. *r̥* developed regularly as *or*, *e.g. porta* (for **pr̥-tā*, root *per-*; *cf. Gr. πείρω*, for **πép-ṛω*); *cord-is* (for **cr̥d-*); *cornū* (for *cr̥n-*). In some words this *or* seems to have developed to *ur*, *e.g. curvus* (**cr̥vós*, root *cerv-*; *cf. cerv-ix*); *curtus* (for **cr̥-tōs*, root *cer-*, 'cut'; *cf. Gr. κείρω*, for **κερῖω*).

Before vowels *r̥* developed as *ar*, *e.g. carō*, 'flesh' (for **cr̥-ō*, from root *cer-*, 'cut').

Like the sonant *l*, the sonant *r* was sometimes long in quantity. It then developed as *rā* or *ar*, *e.g. strātus* (for **str̥-tōs*; root *ster-* in *sternō*); *crātis* (for **c̄r̥-tis*); *armus* (for *r̄mós*).

3. In certain instances a sonant *r* arose in Latin itself. This sonant *r* developed differently from the Indo-European *ṛ* above described, regularly becoming *er*. Thus in the Nominative Singular of *ro*-stems, *ager*, for example, was originally **agros*; by Syncope (see § 92) **agros* became **agr̥s*, whence by assimilation **agr̥(r)*, and by development of *ṛ* to *er*, *ager*. Similarly, stems in *-ris* developed an *er* in the Nominative Singular. Thus *ācris* gave first **ācr̥s*, then **ācr̥*, whence *ācer*. Other instances of the same change are *libertās* for **līb̥r̥tās* (root *libro-*), *acerbus* for **ācr̥-bus*; *incertus* for **inc̥rtus* (from **incritos*, — § 75. 2, — root *cri-*); *sēcernō* for **sēc̥rnō* (from **sēc̥rinō*, — § 75. 2, — root *cri-*); *agellus*, *i.e.* **ager-lus* for **āgr̥-lus*, from *agro-*.

Similarly sonant *l* sometimes arose secondarily in Latin and developed as *el*, *e.g.* *catel-lus*, for **catl̥-lus*, by syncope for **catllo-lus* (§ 92).

THE NASALS, *m*, *n*.

The Nasals as Consonants.

101. As consonants the Latin nasals exhibit few peculiarities.

1. Before *j*, *m* became *n*, *e.g.* *veniō* for **gemjō* (with labio-velar *g*; § 94. 2); *quoniam* for **quomjam*.

2. On the tendency of *m* to disappear before labials, and *n* before dentals, see § 20. 2-4.

The Nasals as Sonants.

102. In the Indo-European parent-speech, whenever roots which, in their strong grade, contained *em*, *om*; *en*, *on*, became reduced to the weak grade (see § 64. *b*), the *m* or *n* (by the disappearance of the *e* or *o*) became sonant, *i.e.* endowed with vocalic character, usually indicated by *m̥*, *n̥*. English has these sounds in *butn̥* (written *button*), *rhythm̥*, *etc.*

1. These Indo-European sonant nasals developed in Latin regularly as *em* and *en*, *e.g.* *septem* (for **septm̥*); *decem* (for

**dec̄m*) ; *ped-em*, *mīlitem*, etc., for **ped̄m*, *mīlit̄m*, etc. ; *mementō* for **me-m̄n̄-tōd* ; *tentus* for **tn̄-tōs* (root *ten-*) ; and in the suffix *-men* for *-m̄n̄*, e.g. *nōmen*.

2. Like the liquid sonants (see § 100. 1, 2) the nasal sonant *n* is sometimes long, and then regularly develops as *nā*, e.g. *antae* for **n̄tae* ; *gnā-tus* (for **gn̄-tōs* ; root *gen-*) ; *gnā-rus* (for **gn̄-rōs*). An instance of *n̄* is perhaps seen in (*d*)*māteriēs* (for **d̄m̄teriēs*, from root *dem-*, 'build' ; cf. *dom-us*).

THE SEMI-VOWELS *j*, *v*.

103. 1. Primitive intervocalic *j* regularly disappeared, e.g. *trēs* for **tre-es*, from *trejes* ; *moneō*, etc., for **monejō*.

2. When following a consonant, primitive *j* became *i*, e.g. *veniō* for **venjō* ; *capiō* for **capjō* ; *medius* for **medjōs*.

3. Intervocalic *v* also often disappears, accompanied by contraction of the vowels which it separated, e.g. *cōntiō* for *co(v)entiō* ; *lātrīna* for **la(v)ātrīna* ; *nōlō* for **no(v)olō* ; *jūcundus* for *ju(v)icundus* ; *jūnior* for **juvenior*. Yet this law does not affect all instances of intervocalic *v*.

4. *av* and *ov* in unaccented syllables regularly became *u*, e.g. *ablūō* for **āblavō* ; *dēnuō* for *dē novō* ; *implūō* for **implovō* ; *induo* for **indovō* ; *suus* and *tuus* for earlier *sovos* and *tovos*, owing to their frequent enclitic (unaccented) use.

5. Before *o*, *v* regularly disappeared, e.g. *sūdōr* for **soidōs* from **svoidōs* ; *coenom* for **quoinom* ; *secundus* for **sequondus* ; *socrus* for **svocrus* (from **svecrus* ; § 73. 4) ; *somnus* for **sopnus* from **svop-nos* (earlier **svep-nos*) ; *soror* for **sosor* (§ 98. 1), from **svos-or* (earlier **svesor*).

CONSONANT CHANGES.¹

INITIAL COMBINATIONS.

104. 1. Initial consonant combinations often drop the first consonant. Thus :

a) Mute lost :

- 1) *p* in *tilia* for **ptilia* (Gr. *πελέα*); *sternuō* for **psternuō*.
- 2) *t* in *lātus* for **tlātus* (root *tel-*); *d* in *Jū-piter* for **Djeu-pater* (cf. Gr. *Ζεύς* for **Διεύς*).
- 3) *g* in *lac* for **glact* (cf. *γάλακτος*), also in *nātus* for *gnātus*; *nōtus* for *gnōtus*; yet the *g* appears in the archaic language and in compounds, e.g. *ignōtus* (for **ingnōtus*); *cognātus* (for **con-gnātus*). By analogy *cognōmen* takes a *g* (for **comnōmen*).

b) *s* lost :

- 1) before mutes: *torus* for **storus* (root *ster-*, *stor-*; cf. *ster-nō*, *stor-ea*, 'mat'); *tegō* for **stegō* (cf. *στέγω*); further, in *līs*, *locus*, *lātus*, 'broad,' for *stlīs*, *stlocus*, *stlātus*. Early Latin still has *stlocus* (e.g. CIL. v. 7381) and *stlātus*, while *stlīs* is regularly used in the phrase *Xvirī stlītibus jūdīcandīs*. Cf. also Quintilian, i. 4. 6.
- 2) Before liquids and nasals: in *lūbricus* for **slūbricus*; *ninguit*, *nix* (for **sninguit*, **snix*); *mīrus* for **smīrus*; *nūbō* for **snūbō*.

c) *v* lost in *lāna* for **vlāna*; *rādīx* for **vrādīx*.

2. *dv-* becomes *b* in *bellum* (and derivatives); in *bonus* and *bis* (earlier *dvis*; cf. Gr. *δῖς* for **δφῖς*); *bīmus* for **dvi-him-us*, 'of two winters.' The early forms *dvel-lum*, *dvonōrum* are preserved in inscriptions, and as

¹ See especially Stolz, *Lateinische Grammatik*³, §§ 62-69; *Lateinische Lautlehre*, pp. 295-334.

archaisms in the poets. By the side of forms with *b-* from the foregoing roots, we find also forms with *d-*, e.g. *dīmus*, *dēs* (= *bēs*), *diennium*. These are archaic or dialectal, but *dīrus*, a classical word, is apparently for **dvei-ros*.

CONSONANT CHANGES IN THE INTERIOR OF WORDS.

105. Simplification of Compound Consonant Groups.—1. In the case of groups of three or more consonants, one or more were regularly dropped in the formative period of the language to facilitate pronunciation. Examples are: *suscipiō* for **subscipiō*; *asportō* for **abs-portō*; *ostendō* for **obs-tendō*; *misceō* for **mig-sceō* (cf. Gr. *μίγ-ννμ*); *discō* for **di-de-scō*; *illūstris* for **illūcstris*; *suēscō* for **suēdscō*; *ecferrī* for **ecs(ex)ferrī*; *pāstus* for **pāscetus*; *mulsi* for **mulg-sī*; *ultus* for **ulctus*; *quīntus* for **quīnctus*; *ārsī* for **ārd-sī*; *tortus* for **torctus*; *ursus* for **urcsus*; *sparsi* for **spargsī*; *bimēstris* for **bimēns-tris*; *poscere* for **porcs-cere*; *Tuscus* for **Turscus* (cf. Umbrian *Turskum*); *alnus* for **alsnus*; *fulmentum* for *fulc-mentum*; *urna* for **urc-na* (cf. *urc-eus*), *quernus* for **querc-nus*.

Here also belong such compound forms as *ignōscō* for **ingnōscō*; *cognōscō* for **congnōscō*; *agnōscō* for *adgnōscō*.

2. Often such simplification is merely preliminary to further changes,—regularly so when the groups *sl*, *sm*, *sn* arise. Compensatory lengthening (§ 89) then takes place, e.g. *pīlum*, ‘mortar,’ for **pinslum*, **pislum*; *āla* for **acs-la*, **asla*. The preposition *ē* as a ‘by-form’ of *ex* arose in this way, e.g. *ēligō*, *ēnormis* for **ecsligō*, **esligō*; **ecsnormis*, **esnormis*; after *ē* became established in compounds, it came to be used separately. So also *trā-* arose, e.g. *trādūcō* for *trānsdūcō*, **trāsdūcō*. *Trānsdūco* is the result of ‘Re-composition’ (§ 87. 3).

3. Where two of three consonants in a group are a mute and a liquid, owing to facility of pronunciation, simplification does not

take place, *e.g.* *astrum*, *antrum*. Other groups easy of pronunciation are sometimes preserved, *e.g.* *sculpsī*, *serpsī*, *planxī*, though these may be due to analogy. Compounds like *trānscrībō*, *trānsportō*, being much later than the formative period of the language, are not to be regarded as exceptions.

ASSIMILATION.

106. 1. Assimilation is designated as 'regressive' when the first of two consonants is assimilated to the second, 'progressive' when the second is assimilated to the first.

2. By regressive assimilation the following changes take place :

bc to *cc*, *e.g.* *occurrō*.

bg to *gg*, *e.g.* *suggerō*.

bf to *ff*, *e.g.* *sufferō*.

bp to *pp*, *e.g.* *supportō*.

dc to *cc*, *e.g.* *accurrō*.

dg to *gg*, *e.g.* *aggerō*.

dl to *ll*, *e.g.* *sella* (**sed-la*); *lapillus* (**lapid-lus*).

dn to *nn*, *e.g.* *mercēnnarius* for **mercēd-narius*.

ds to *ss*, *e.g.* *jussus* for **jud-sus* (root *judh*-).

dp to *pp*, *e.g.* *apportō*.

tc to *cc*, *e.g.* *siccus* for **sit-cus* (*cf.* *sit-is*).

ts to *ss*, *e.g.* *quassī* for **quatsī*.

pm to *mm*, *e.g.* *summus* for **supmus*.

pf to *ff*, *e.g.* *officīna* for **opficīna*, *i.e.* **opificīna*; see § 92.

nm to *mm*, *e.g.* *gemma* for **gen-ma*, *i.e.* 'sprout' (root *gen*-).

nl to *ll*, *e.g.* *ūllus* for **ūnlus*, *i.e.* **ūnulus*; see § 92.

ns sometimes to *ss*, which was later simplified to *s*, *e.g.* in adjectives in *-ōsus*. The earlier form was *formōnsus*, *etc.*, whence *formōssus* (*cf.* § 98. 2), *formōsus*.

rl to *ll*, *e.g.* *stella* for **ster-la*; *agellus* for **ager-lus* (see § 100. 3);

paullus (classical *paulus*) for **paur-lus* (*cf.* Gr. *παῦρος*).

3. By progressive assimilation the following changes occur :

ld to *ll*, e.g. *percellō* for **percelldō*. Assimilation affects only a primitive *ld*; in *valdē* (= *validē*; § 92), for example, the *ld* remains unchanged.

ln to *ll*, e.g. *pellis* for **pelnis*; *ln* resulting from Syncope (§ 92), as in *ūlna* for **ūlena*; *volnus* for **vol-inus*, is not affected by this change.

ls to *ll*, e.g. *velle* for **velse*; *facillumus* for **facilsumus*.

rs to *rr*, e.g. *ferre* for **fer-se*; *torrēre* for **tors-ēre*. Secondary *rs*, for *rtt*, as in *versus* for **verttos* (see § 108. 1) generally remained unchanged, but in the colloquial language such an *rs* sometimes became *ss* or *s*, e.g. *prōssus*, *prōsus* for *prōrsus* (i.e. *prōversus*).

4. **Partial Assimilation.** — Sometimes assimilation is only partial. Thus :

a) A labial nasal may become dental, or a dental nasal may become labial, owing to the influence of the following mute, e.g. *centum* for **cemtum*; *ventum* for **vemtum* (root *guem-*); *con-tendō* for **com-tendō*, etc., whence arose *con-* as a separate form of the preposition *com-*.

b) A voiced mute may become voiceless before a following voiceless sound, e.g. *āc-tum* (for **āg-tum*); *scrip-sī* for **scribsī*.

c) The labial mutes *p* and *b* are changed to the corresponding nasals before *n*, e.g. *somnus* for **sop-nus* (earlier **svep-nos*; § 104. 2. b); *Samnium* for *Sab-nium* (cf. *Sabīnī*); *antennae* for **ant-ap-nae*; lit. 'opposite fastenings,' — hence 'yards.'

METATHESIS.

107. Metathesis or transposition is perhaps to be recognized in *fundō* for **fud-nō*; *unda* for **ud-na*; *pandō* for **pat-nō*; and *tendō* for **te-tn-ō* (reduplicated present).

OTHER CONSONANT CHANGES.

108. 1. An original *dt* or *tt* became *ss*, e.g. *sessus* for **sed-tus*; *passus* for **pat-tus*. After a long vowel or diphthong such an *ss* became *s* in the Augustan era, though retained in Cicero's time (§ 98. 2), e.g. *usus*, earlier *ūssus*, for **ūttus*; *divisus*, earlier *dīvīssus*, for **dīvīdtus*. In such forms as *lāp-sus*, *pulsus*, *nexus* (= *nec-sus*), *fixus*, *s* has not developed phonetically, but has simply been borrowed from words like *sessus*, *fīsus*, etc. When followed by *r* an original *dt* or *tt* became *st* (instead of *ss*), e.g. *claustrum* for **claud-trum*; *pedestris* for **pedettris*. In syncopated forms and compounds, *dt* simply became *tt*, e.g. *cette* for **cedate* (cf. *cedo*), *attendō*; i.e. these forms belong to a period in which the change of *dt*, *tt* to *ss* was no longer operative.

2. Between *m* and *l*, a parasitic *p* developed, e.g. *exemplum* for **exemlom*; *templum* for **tem-lom*. Such a *p* developed also between *m* and *s* in *sūmpsī*, *contempsī*, and between *m* and *t* in *ēemptus* and *contemptus*. This phenomenon apparently was confined to accented syllables, though *hiemps* is attested occasionally in good Mss.

3. An original *-sr-* became *br*. The steps in this change were first from *sr* to *pr* (*p* = Eng. *th*), then to *fr*, whence *br*. Examples are: *sobrīnus* for **sosr-īnus* (**sosr-*, from **sosor*, earlier form of *soror*; see § 104. 2 b); *tenebrae* for **tenesrae*; *membrum* for **memsrom*; *fūnebris* for **fūnesris* (cf. *fūnes-tus*); *muliebris* for **muliesris* (cf. *mulier-is* for **mulies-is*; § 98. 1); *fibra* for **fis-ra*; cf. *filum* for **fis-lom*.

4. For the disappearance of *s* before *l*, *m*, *n*, *r*, *b*, *d*, *g*, combined with lengthening of a preceding short vowel, see § 89.

CONSONANT CHANGES AT THE END OF WORDS.

109. 1. Single consonants are usually retained. Final *s* does not become *r* phonetically, but is changed after the analogy of the *r* arising by rhotacism in the oblique cases; see § 98. 4. Final *n* in the Nominative Singular of *n*-stems disappeared prior to the existence of Latin as a separate language, e.g. in *homō* for **hom-ō(n)*; **carō(n)*, etc. After a long vowel or a diphthong, final *d* is found in early inscriptions, but disappeared toward the close of the archaic period. Examples are: Ablatives Singular of the first and second declension, e.g. *praedā* for *praedād*; *Gnaivō* for *Gnaivōd*; also certain Adverbs and Prepositions, e.g. *extrā*, *suprā*, etc.; *prō-* for *prōd-*, which latter appears in *prōdesse*. So also *sē-* for *sēd-*, which latter appears in *sēditō*.

2. Geminated consonants are not written at the end of a word; thus *as* for **ass* (cf. *as-sis*); so *fel* for **fell*, i.e. **fels* (§ 106. 3); *far* for **farr*, i.e. **fars* (§ 106. 3); yet it is probable that geminated consonants were spoken in these words, e.g. *hocc* (for **hodd*), not *hōc*; so *farr*, *fell*, *ass*, *ess*, 'thou art'; this last is the regular form in Plautus.

3. Groups of two consonants at the end of a word are simplified, —

a) By dropping the second, e.g. *mel* for **melt*; *lac* for **lact*; *os* for **ost*; *cor* for **cord*. In *fert*, *volt*, *est*, the final consonant is retained after the analogy of *agit*, etc. A regular exception to the general principle is seen in final *ps* and *x*, e.g. *ops*, *urbs* (*bs* = *ps*; see § 27); *rēx*, *lēx*.

b) By dropping the first, e.g. *mīles* for **mīlets*; *pēs* for **pēds*; and in final syllables in *-ns*, as *agrōs* for **agrons*; *turrīs* for **turrins*.

4. Final *-nts*, *-nds*, *-rts*, *-rds*, *-lts* lost the *t*, e.g. *mōn(t)s*, *frōn(d)s*, *concor(d)s*, *ar(t)s*, *pul(t)s*. Final *-nx*, *-lx*, *-rx* are permitted, e.g. *lanx*, *falx*, *merx*.

DISAPPEARANCE OF SYLLABLES BY DISSIMILATION.

110. By a natural tendency, when two syllables began with the same consonant, the first syllable was often dropped, e.g. *dēbitāre* for **dēbilitātāre*; *calamitōsus* for **calamitātōsus*; *dentīō* for **dentitīō*; *portōrium* for **portitōrium*; *venēficus* for **venēnificus*; *voluntārius* for **voluntātārius*; *sēmodius* for **semi-modius*.

CHAPTER VII.

INFLECTIONS.

DECLENSION OF NOUNS AND ADJECTIVES.¹

Ā-Stems.

111. In the Indo-European parent-speech there was Ablaut (§ 62) in the suffix of *ā*-stems. The weak grade of *ā*, viz. *ǎ* (§ 66), occurred in the Vocative Singular. Elsewhere the suffix remained *ā*.

112. **Nominative Singular.** — 1. The original Nominative Singular had *-ā*, e.g. **portā*. But *-ā* was shortened to *-ǎ* before the beginning of the historical period. Possibly this shortening was owing to the influence of the Accusative Singular, where **-ām* regularly became shortened to *-ǎm* (§ 88. 2). The relation of the Nominative to the Accusative in *o*-stems, *u*-stems, and *i*-stems might easily have led to such shortening. Cf. the following proportional representations:

$$\left. \begin{array}{l} \text{servōs} : \text{servōm} \\ \text{fructūs} : \text{fructūm} \\ \text{īgnīs} : \text{īgnīm} \end{array} \right\} : : \text{portā} : \text{portām}.$$

Possibly the law of Breves Breviantes (§ 88. 3), by which **fūgā*, **fērā*, **rōtā*, etc., regularly became *fūgǎ*, *fērǎ*, *rōtǎ*, etc., led to the extension of *-ǎ* for *-ā* to all Nominatives. Either one or both of these influences may have operated to produce the shortening of final *ā*.

¹ See, in general: Brugmann, *Grundriss*, ii. §§ 184-404; Lindsay, *Latin Language*, chaps. v. and vi.; Stolz, *Lateinische Grammatik*³, §§ 75-88; Sommer, *Handbuch der Lateinischen Laut- und Formenlehre*, §§ 179-265.

2. The Latin has developed a number of Masculine *ā*-stems, e.g. *agricola*, 'farmer' (probably originally 'farming'); cf. *optiō*, *m.*, 'centurion's assistant,' from *optiō*, *f.*, 'choice, selection.' Other languages exhibit this same phenomenon, e.g. Greek. Thus *νεανίας*, 'a youth,' probably goes back to a lost **νεανιά*, 'youth' (abstract), the *-s* being appended to indicate the Masculine signification; so further many Greek Masculines in *-ās*, *-ης*. The mediaeval Latin word *bursa*, *f.*, meant 'company of students,' but subsequently became individualized to mean 'a student' (German *Bursche*); so *camerāta*, *f.*, 'roomful of comrades,' later 'comrade' (German *Kamerad*). Cf. also English *justice* (the quality) and *justice* ('magistrate'); Spanish *justicia*, by change of gender, also covers these two senses.

113. Genitive Singular. — The ending of the Genitive Singular in Indo-European was *-s*, *-es*, *-os*, the different forms representing Ablaut (§ 64. *a*), as the result, probably, of varying accentual conditions of the parent-speech. In the case of *ā*-stems, the case-ending was *-s*, which united with the *ā*- of the stem and gave *-ās*. This termination appears in but a few Latin words. It is preserved in *familiās*, in the combinations *pater familiās*, *māter familiās*, etc., but elsewhere is archaic, e.g. *viās* (Enn. *Ann.* 421 Vahl.), *fortūnās* (Naevius).

114. The Genitive Singular in *-ae* goes back to an earlier *-āi* (dissyllabic), which is found in the poets as late as the Augustan Age. This termination *-āi* apparently arose by appending the Genitive termination *-i* of the *o*-stems directly to the stem, e.g. *portā-i*. Whether *āi* became *ai*, *ae* by regular phonetic processes, or under the influence of the Dative and Locative ending *ae*, is uncertain.

115. Dative Singular. — The Indo-European case-ending of the Dative Singular was *-ai*. But this had already in the Indo-Euro-

pean parent-speech contracted with the final \bar{a} of the stem, producing $*\bar{a}i$, whence successively $\bar{a}i$, $-ae$ (§§ 86 ; 80. 1).

116. Accusative Singular. — The case-ending was $-m$ in Indo-European. This in combination with \bar{a} of the stem must have given a primitive Latin $*\bar{a}m$, *e.g.* $*port\bar{a}m$; but the vowel in all final syllables in m had probably become shortened before the beginning of the historical period (§ 88. 2).

117. Vocative Singular. — There was no case-ending in the Vocative Singular of \bar{a} -stems in the Indo-European parent-speech. The Vocative simply had the weak form \check{a} of the suffix \bar{a} (§ 111). Whether the Vocative in actual use represents this original formation or is merely the Nominative employed in Vocative function cannot be determined.

118. Ablative Singular. — The Indo-European case-ending of the Ablative Singular seems to have been d with some preceding vowel, *i.e.* $\bar{a}d$, $\check{e}d$, or $\check{o}d$. In the noun-declension, this case-ending belonged in Indo-European exclusively to the \check{o} -stems (see § 130). In Latin it was transferred to \bar{a} -stems also, combining with the final \bar{a} of the stem to produce $\bar{a}d$, which is preserved in early inscriptions, *e.g.* PRAIDAD, CIL. i. 63, 64 ; SENTENTIAD, CIL. i. 196. 8, 17. These inscriptions belong to the period of Plautus ; but it is generally thought that such Ablatives were probably archaistic at that time. Before an initial consonant, final d when following a long vowel regularly disappeared. Theoretically, therefore, for a while two forms must have existed, — an ante-consonantal form, *praidā*, *etc.*, and an ante-vocalic form, *praidād*, *etc.* But the ante-consonantal form early became predominant, — probably before 200 B.C.

119. Locative Singular. — The case-ending of the Locative Singular in Indo-European was \check{i} . In \bar{a} -stems this combined

with *-ā* of the stem to produce *-āi*, a long diphthong (§ 86), which then became shortened to *-āi*, later *-ae*, just as in the case of the Dative (§ 115).

120. Nominative and Vocative Plural.—The original case-ending of the Nominative Plural in Indo-European was *-ēs* for all nouns. In the case of *ā*-stems, this *-ēs* must early have contracted with final *-ā* of the stem to **-ās*. This **-ās* is the regular termination of the Nominative Plural of *ā*-stems in the other Italic dialects, — Oscan, Umbrian, *etc.*; but has entirely disappeared in Latin.¹ Instead of *-ās*, we have the termination *-āi*, which goes back to an original **portāi*. This formation is analogical, after the Nominative Plural of *ō*-stems in *-oi* (§ 131). The Vocative Plural of *ā*-stems is simply the Nominative employed in a Vocative function.

121. Genitive Plural.—The case-ending of the Genitive Plural in Indo-European was *-ōm*. With the *-ā* of the stem this case-ending must have early contracted to **-ām*, a termination which has entirely disappeared from all the Italic dialects. Instead of **-ām* the Latin has *-ārum*, a termination borrowed from the Genitive Plural of the Pronominal Declension. This *-ārum* is developed by Rhotacism (§ 98. 1) from an earlier **-āsom*; compare Homeric Greek forms in *-aωv*, *e.g.* *θεάων* for *θεά(σ)ων*. The forms ending in *-um*, which sometimes occur in the poets, *e.g.* *caelicum*, *Dardanidum*, are new formations, possibly in imitation of the *o*-stems (§ 132), possibly after the analogy of such Genitives as *Aeneadum* (from *Aeneadēs*).

122. Dative and Ablative Plural.—The Indo-European parent-speech had no special form for the Ablative in the Plural. The Ablative Plural, in all languages in which that case occurs, is identical in form with the Dative. The genuine Dative and Ab-

¹A few possible vestiges occur in the early language.

lative Plural of \bar{a} -stems in $-\bar{a}bus$ (on $-bus$, see § 144) appears only in a few words where distinction of sex is important, *e.g.* *equābus*, *filiābus*, *libertābus*, *etc.* Elsewhere we have the termination $-\bar{i}s$, which is historically an instrumental formation borrowed from the o -stems. The termination of the Instrumental Plural of the o -stems was $-ois$ (see § 133). By analogy the \bar{a} -stems created the termination $-ais$, which regularly became $-\bar{i}s$ (see § 80. 2).

Nouns in $-ia$ sometimes contract the \bar{i} with the $-\bar{i}s$ of the termination to $-\bar{i}s$, *e.g.* Virgil, *Aen.* v. 269, *taenīs* for *taeniīs*. Words in ia , *e.g.* *Maia* (the adjective) have $-\bar{i}s$, *e.g.* *Kalendīs Maiīs* (for *Maiīs*) ; see § 80. 1.

123. The Accusative Plural. — The case-ending of the Accusative Plural in Indo-European was $-ns$. The n disappeared according to § 109. 3, *i.e.* *portās* for **portāns*.

Ŏ-Stems.

A. MASCULINES AND FEMININES.

124. In the Indo-European parent-speech there was Ablaut (§ 70) in the suffix of o -stems. Both forms of the strong grade occur, \bar{e} and \bar{o} . The former appears in the Vocative and Locative Singular, and partially in the Ablative ; the latter in the remaining cases.

125. Nominative Singular. — This is formed by appending $-s$ to the stem, *e.g.* *horto-s*, later *hortus* (§ 76. 1). On *ager*, see § 100. 3.

126. Locative and Genitive Singular. — In the Locative Singular the suffix took the form e (§ 124), which, with the Locative case-ending \bar{i} , gave by contraction $-ei$, whence regularly $-\bar{i}$. The Locative function is still apparent in *humī*, *bellī*, *domī*, *herī*, also in town names, *e.g.* *Corinthī* ; and in *quārtī*, *quīntī*, *etc.*, in such expressions as *quārtī diē*, *quīntī diē* (§ 173).

It was formerly thought that the Latin Genitive Singular of ō-stems was a Locative that had taken on a Genitive function. But this position is no longer tenable. For in the *Senatus Consultum de Bacchanalibus* of 186 B.C., where Indo-European *ei* is still regularly written *Ei*, the Genitive ending appears as *i*, showing that we have a different formation from the Locative. Besides this, the Genitive Singular of iō-stems (e.g. *imperium*) is different from the Locative. For while throughout the Republican period the Genitive of iō-stems ends in *-ī*, the Locative of such stems ends in *-iī*, e.g. *Brundisiī*. The Genitive, therefore, is probably distinct in origin from the Locative, but what the origin of the Genitive *-ī* is, is not clear. Words in *-eius* formed the Genitive in *-eī*, e.g. *Pompeī* from *Pompeius* (§ 82. 3).

127. Dative Singular. — The Indo-European case-ending *-ai* early combined by contraction with final *o* of the stem, producing *-ōi*. Perhaps we have this (shortened to *-ōi*; § 86) in *Numasioi* in our earliest Latin inscription, CIL. xiv. 4123. In the historical period *-ōi* has become *ō* (§ 86).

128. The Accusative Singular. — The regular ending *-m* is appended to the stem in *o*, e.g. *horto-m*, classical *hortum* (§ 76. 5).

129. Vocative Singular. — The stem with the *e*-suffix serves as a Vocative, e.g. *hort-e*; there is no case-ending. Not only proper nouns in *-ius* but *all* nouns in *-ius* regularly had *-ī* (by contraction for *-īe*) in the Vocative Singular. But barring *fīlī*, Vocatives from other than proper names are rare. Forms in *-ie* are practically unknown, except as cited by the grammarians.

130. Ablative Singular. — *O*-stems were the only class of nouns in Indo-European that originally had a special Ablative case-ending; other nouns, so far as they exhibit a special ending

for this case, have borrowed it from *ō*-stems. The form of this case-ending is *d* with a preceding vowel, *ā*, *ē*, or *ō*, *i.e.* *-ād*, *-ēd*, or *-ōd*. As the case-ending appears only in contraction, the vowel cannot be determined. The stem appears in two forms, — one in *o*- and one in *e*- (§ 124), *e.g.* *rēcto*- and *rēctē*-. With the former of these the case-ending combined to produce **rēctōd*, and with the latter **rēctēd*. Forms with *d* appear in early Latin, *e.g.* *POPLICOD*, *FACILUMED* (= *facillimē*). Later (probably shortly before 200 B.C. in the ordinary speech) the *d* disappeared; see § 118. The forms in *-ē* became appropriated as Adverbs, — *rēctē*, *facillimē*, *etc.*

131. Nominative and Vocative Plural. — The Nominative Plural of *o*-stems in Indo-European was originally formed by appending the case-ending *-ēs* to the stem, giving Indo-European *-ōs*. This termination appears in the other Italic dialects, — Oscan, Umbrian, *etc.*; but in Latin the *o*-stems have borrowed the termination of the Pronominal Declension, *viz.* *-oi*. A tradition of this appears in *pilumnōe*, *poplōe*, cited by Festus (p. 205, ed. Müller). But final *oi* regularly became *ī*, the classical termination, *e.g.* *hortī*; *dī* is common as the Nominative-Vocative Plural of *deus*.

132. Genitive Plural. — The original termination was *-ōm*, the result of contraction of final *o* of the stem and the case-ending *-ōm* (§ 121). This termination, shortened to *-ōm* (§ 42. 1), appears in early Latin, *e.g.* *Rōmānom*, and in the form *-um* (§ 76. 5) is also regular in certain words in the classical period, *e.g.* *talentum*, *modium*, *deum*, *etc.* (*Gr.* § 25. 6. *a*). The usual ending *-ōrum* is of secondary origin, and is formed after the analogy of the Genitive Plural of *ā*-stems (§ 121).

133. Dative and Ablative Plural. — The so-called Dative and Ablative Plural is in reality an Instrumental. The Indo-European

form of the termination was *-ōis*. This in Latin became first *-ōis* (§ 86), and then *-eis*, *-īs* (§ 81. 4), the classical termination. Cf. § 122. In *-iō*-stems *-iīs* often contracts to *-īs*, e.g. *cōnūbīs* for *cōnūbiīs*; so *fīlīs*, *auspīcīs*; *dīs* is common as the Dative-Ablative Plural of *deus*.

134. Accusative Plural. — The Indo-European case-ending was *-ns*. Latin **horto-ns* would represent the primitive formation; this became *hortōs*; § 109. 3. *b*.

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135. In the singular these present no special peculiarity. The Nominative, Accusative, and Vocative have *-m* as case-ending, which is Indo-European.

136. The Nominative, Accusative, and Vocative Plural have *-ǣ*. This ending is in all probability identical with that of the Nominative Singular of *-ā*-stems; i.e. certain Feminine collective nouns came to be felt as Plurals and were so used syntactically. Thus an original **jugā* (Latin *jugā*) meaning 'collection of yokes' (cf. German *das Gejōche*) came to be felt as a Plural and was construed accordingly. The use of the Singular in Greek with a Neuter Plural subject, apparently dates from the time when the Neuter Plural was still a Feminine Singular. In Latin this *-ā* of the Nominative, Accusative, and Vocative Plural of *ō*-stems was transferred also to consonant, *ī*-, and *ū*-stems (e.g. **nōminā*, **marīā*, **cornuā*), and when (by the 'Breves Breviantes' law; § 88. 3) the *-ā* of *jugā*, etc., was shortened to *-ǣ*, this shortening was extended also to other stems, giving *nōmina*, *maria*, *cornua*, etc.

Consonant Stems.

A. MASCULINES AND FEMININES.

The original case-endings are seen to best advantage in the Mute stems.

137. Nominative and Vocative Singular.—The case-ending is *s*, which combines with the final consonant in the ways enumerated in *Gr.* §§ 32, 33, *e.g.* *prīncep-s*; *mīles*; *dux*. The Nominative serves also as Vocative.

138. Genitive Singular.—Of the three forms of the Indo-European case-ending, *viz.* *-s*, *-es*, *-os*, the second, *-es*, is the one which regularly appears appended to consonant stems. This becomes *-īs* according to § 73. 2. *a*), *e.g.* *ped-īs*, *mīlit-īs*. Traces of the ending *-os* are seen in early Latin NOMIN-VS (*-us* for *-os* acc. to § 76. 5), CASTOR-VS, HONOR-VS, *etc.*, — perhaps also in *opus* in the phrase *opus est*, ‘it is necessary.’ *Cf.* § 341. 2.

139. Dative Singular.—The Indo-European case-ending was probably *-ai* which regularly became *-ī*, *e.g.* *ped-ī* for **ped-ai*; *mīlitī* for **mīlitai*.

140. Accusative Singular.—The Indo-European case-ending was *-m*, which, after a consonant, necessarily became sonant (§ 102. 1) and developed as *-em*, *e.g.* *pedem* for **pedm*; *prīncipem* for **prīncipm*.

141. Ablative Singular.—In the Indo-European parent-speech, as already stated, there was no separate form for the Ablative Singular except in *ǝ*-stems. Ordinarily the Genitive served also as Ablative. In Latin consonant stems the ending *-e* is the Indo-European Locative ending *-i* (§ 75. 3). But after the analogy of *ī*-stems, the Ablative of consonant stems sometimes ends in *īd*, *-ī*, *e.g.* AIRID (= *aere*), CONVENTIONI; § 153. In the

Ablative Singular of adjectives with consonant stems, the termination *-ī* has become practically universal (e.g. *prudentī*, *audacī*, *felicī*, etc.). So also in town-names, to denote place where, e.g. *Tiburī*, *Carthāginī*, *Lacedaemonī*, etc. To denote place whence, the *-ē* forms are used, e.g. *Carthāgine*.

142. Nominative and Vocative Plural. — The Indo-European case-ending of the Nominative Plural was *-es*, seen in Greek *-ες* (e.g. *φύλακ-ες*), but is not preserved in Latin. Plautine *canēs*, *pedēs*, *turbīnēs*, etc., come under § 88. 3. The ending *-ēs* which appears regularly in all nouns of the so-called Third Declension has been borrowed from the *ī*-stems; see § 154. Owing to the fact that the Nominative and Accusative Plural were regularly alike in consonant stems (e.g. *militēs*, *militēs*); and owing to the further fact that many consonant stems took *-īs* in the Accusative Plural, after the *ī*-stems (§ 159. 1), it happened that by proportional analogy this *-īs* was transferred to the Nominative Plural. The phenomenon is confined almost exclusively to early Latin, where we find such forms as *IOVDICIS*, (= *jūdicīs*), *hominīs*, etc.

143. Genitive Plural. — The regular ending *-um* is for earlier *-om*, from *-ōm*; see § 121.

144. Dative and Ablative Plural. — The Indo-European ending was *-bhos*, which became *-bos* (§ 97. 1. *b*). This appears once or twice in early Latin, but soon became *-bus* (§ 76. 5). The *i* of *-ibus*, the regular termination of all consonant stems, is borrowed from the *i*-stems; § 156.

145. Accusative Plural. — The Indo-European ending *-ns* became *-ŋs* (§ 102. 1) after a consonant. This regularly became **-ens*, whence *-ēs*; § 109. 3. *b*.

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146. The Nominative and Accusative Singular are formed without case-ending. For the *-ā* of the Nominative and Accusative Plural, see § 136.

STEM-FORMATION OF CONSONANT STEMS.

147. Several formative suffixes originally showed Ablaut (§§ 62, 70). Thus:

1. **S-Stems.**—Stems formed with the suffix *-os* (*-us*); e.g. *gen-us*, had in certain cases the suffix *-es-*; thus originally Nom. **gen-os*, Gen. **gen-es-es*, Dat. **gen-es-ai*, later *gen-us*, *gen-er-is*, *gen-er-ī* (§ 98. 1). In some words the *-os-* suffix of the Nominative invaded the oblique cases, e.g. *temp-us*, Gen. *temp-or-is* (for **temp-os-es*). Yet the *-es-* suffix appears in the adverbs *temp-er-ī*, *temp-er-e*. Cf. also *temp-es-tās*, *temp-es-fivus*, where the original *-es-* has been protected by the following *t*. *Pignus*, which is ordinarily declined *pignus*, *pignoris*, had the *-es-* suffix in early Latin, e.g. *pignerī* (Plautus).

2. **Nasal Stems.**—The suffixes of many nasal stems originally had Ablaut (§§ 62, 70). Thus:

a) The suffix *-ōn-* (lengthened from *-on-*, strong grade; § 62) had another strong form, *-en-*, and a weak one, *-n-*. Most words have lost the *-n-* grade, and show only *-on-* or *-en-*, e.g. *umb-ō* for *umb-ō(n)* (§ 109. 1), Gen. *umb-ōn-is*, etc.; *ōrd-ō(n)*, *ōrd-in-is* (for **ōrd-en-is*, § 73. 2); *turb-ō(n)*, *turb-in-is*. *Car-ō(n)*, Gen. *car-n-is*, shows a trace of the weak grade of the suffix.

b) The suffix *-iō(n)-* had another form of the strong grade, viz. *-ien-*, and a weak grade *-īn-*. The weak grade appears in the other Italic languages, Oscan, Umbrian, etc., but not in Latin, where as a rule we have only *-iōn*, e.g. *āctiō(n)*, *ācti-ōn-is*, though *Aniō(n)* shows *-iēn-* ('protracted form'; § 62. 3) in *Aniēnis*, etc.

c) The suffix *-mō(n)* had also the grades *-men-* and *-mn-*. Sometimes the *-men-* grade appears in the oblique cases, e.g. *ho-mō(n)*, *ho-min-is*, etc.; sometimes the *-mō(n)* of the Nominative appears throughout, e.g. *sermō*, *sermōnis*.

d) Neuters in *-men* show two forms of the suffix. In the Nominative *-men* stands for *-mṇ* (§ 102. 1), e.g. *nō-men* for **nō-mṇ*. In the oblique cases *min-* is for *men-*, e.g. *nō-min-is* for **nō-men-es* (§ 73. 2).

3. *R-Stems*. — Some of these originally had Ablaut in the suffix. Thus:

a) Nouns of relationship in *-ter*, e.g. *pater*, *māter*, *frāter*. These originally had three forms of the suffix, viz. *-ter-*, *tēr-*, and *-tr-* (weak form; § 62). The Greek has clung quite closely to the original declension *πα-τήρ*, *πα-τρ-ός*, *πα-τέρ-α*. In Latin the *-tr-* form of the suffix has gained the supremacy in the oblique cases; in the Nominative, *-ter* represents earlier **tēr* (§ 88. 2).

b) Nouns of agency in *-tor* originally had three forms of the suffix, viz. *-tōr-*, *tōr-*, *-tr-*. In Latin these have all practically been reduced to one, *-tōr* (Nominative *-tōr* being for earlier **tōr*; § 88. 2). The weak grade *-tr-*, however, appears in the corresponding feminine nouns of agency, e.g. *vic-tr-ix*, *gene-tr-ix*, etc.

Ī-Stems.

A. MASCULINE AND FEMININE Ī-STEMS.

148. These originally had Ablaut (§§ 62, 70) in the suffix. The strong forms of the suffix were *-ei-*, *-oi-*; the weak form *-ī-*.

Many original *i*-stems have passed over in Latin into the *-iō(n)* class (§ 147. 2. b). Examples are *statīō* (earlier **statis*; cf. Gr. *στάσις* for **στα-τις*); *-ventiō* (earlier **ventis*; cf. Gr. *βάσις* for **βατις*); *-tentiō* (earlier *-tentis*; cf. Gr. *τάσις* for **τατις*).

149. *Nominative Singular*. — This is regularly formed by appending *-s*, e.g. *īgni-s*, *turri-s*. Several nouns have lost the *i*

before *s* by Syncope (§ 92), *e.g.* *pars* for **part-(i)s* (*cf.* *partim*) ; *gēns* for **gent-(i)s* ; *mēns* for **ment-(i)s*. *Gr.* § 38. 3.

150. Genitive Singular. — The Indo-European termination seems to have been *-eis*, *i.e.* *ei* (strong form of suffix) + *-s*, weak grade of Genitive case-ending (§ 138). But this termination *-eis*, while preserved in Oscan and Umbrian, has disappeared in Latin. The termination *-is* is borrowed from consonant stems.

151. Dative Singular. — The Indo-European case-ending *-ai* was appended to the stem with the suffix *-ei*, thus giving, for example, **turrei-ai*, whence by contraction **turrei*, *turrī*.

152. Accusative Singular. — The regular ending *-m* is appended to the stem, *e.g.* *turri-m*. The termination *-em* (borrowed from the consonant stems) has, however, largely displaced primitive *-im*. See *Gr.* § 37.

153. Ablative Singular. — There was no special form for the Ablative Singular of *ī*-stems in Indo-European. The Latin, however, formed an Ablative in *-d*, *e.g.* *turrīd*, after the analogy of *o*-stems (*hortos* : *hortom* : *hortōd* : : *turris* : *turrim* : *turrīd*). These *-d*-forms, however, are attested by only scanty examples ; the *d* early disappeared (§ 109. 1), leaving the termination *-ī*. But in most nouns the ending *-e*, borrowed from consonant stems, has replaced this *-ī*. Adjectives, however, always have *-ī*.

154. Nominative Plural. — The suffix of the Nominative Plural took the form *-ei-* (§ 148). Thus the primitive formation would be represented by **turr-ei-ēs*. The *i* between vowels first became *j*, and then regularly disappeared. The resulting **turrēcēs* then became *turrēs* by contraction. *Cf.* in Greek *πόλεις* (*ei* = *ē*) for **πόλעי-ες*.

155. Genitive Plural. — The ending *-um* is appended to the stem, ending in the ĩ-suffix, e.g. *turri-um*.

156. Dative and Ablative Plural. — The Indo-European ending *-bhos* is appended to the stem, ending in the ĩ-suffix, e.g. *turri-bus*. On *-bus* for *-*bhos*, see §§ 97. 1. *b*; 76. 5.

157. Accusative Plural. — The termination was *-ns*; hence originally *turrins*, whence *turrīs* (§ 109. 3. *ō*). The termination *-ēs*, which is often used instead of *-īs*, is borrowed from the consonant stems.

B. NEUTER Ī-STEMS.

158. 1. These changed the final *-ĩ* to *-ě* by a regular law (§ 75). Stems of more than two syllables then usually dropped the *-ě* thus developed, while dissyllabic stems retained it, e.g. *calcar(e)*, *animal(e)*; but *mare*, *rēte*.

2. The case-endings of Neuter ĩ-stems are in general the same as for Masculines and Feminines. In the Ablative Singular the termination *-ĩ* is regular. On the *-ǎ* (i.e. *-i-a*) of the Nominative and Accusative Plural, see § 136.

Consonant Stems that have partially adapted themselves to the Inflection of Ī-Stems.

159. As stated in the *Grammar*, § 40, the adaptation is practically confined to the Plural, viz. the Genitive and Accusative, where *-ium* and *-īs* take the place of the normal *-um* and *-ēs*. Several distinct groups of words belong here :

1. One of the most important classes consists of nouns in *-ēs*, e.g. *aedēs*, *nūbēs*, etc. What has led to the adaptation of these words to the inflection of ĩ-stems in the Genitive and Accusative Plural is not certain; but the fact that stems of this class practically never show *-im* in the Accusative Singular or *-ĩ* in the Ablative Singular, whereas regular ĩ-stems in *-īs* frequently show

these endings, makes it impossible to regard nouns in *-ēs*, Gen. *-is*, as actual *ī*-stems.

2. Nouns in *-tās*, Gen. *-tātis*, may possibly represent *ī*-stems, *i.e.* *civitāt-i*; yet the absence of *-im* and *-ī* forms in the Accusative and Ablative Singular is against this. Cf. 1 above.

Ū-Stems.

A. MASCULINE AND FEMININE *u*-STEMS.

160. Like the *ī*-stems, the *ū*-stems had a suffix which appeared in three forms, *viz.* *-eu-*, *-ou-*, and *-u-*. The first two were strong; the last weak. See §§ 64. *c*; 70.

161. Nominative Singular. — The Nominative Singular appends *-s*, *e.g.* *frūctu-s*.

162. Genitive Singular. — The Genitive Singular had the strong form of the suffix, either *-eu-* or *-ou-*. To this was added the Genitive case-ending in its weakest form, *viz.* *-s* (§ 138), thus giving **frūct-eu-s*, or **frūct-ou-s*, whence regularly *frūctūs* (§ 85). Early Latin also shows two other formations, *viz.* in *-uis* and *-uos*, *e.g.* *senātu-is* and *senātu-os*. These represent the other forms of the Genitive case-ending, *-is* being for earlier *-es* (§ 138).

The termination *-ūs* cannot be explained as the result of contraction from either *-uis* or *-uos*. Neither *ui* nor *uo* contracts to *ū*.

In Plautus and Terence *u*-stems largely follow the analogy of *o*-stems and form the Genitive Singular in *-ī*, *e.g.* *senātī*.

163. Dative Singular. — The Indo-European case-ending *-ai* appended to the stem with suffix *-eu-* gave **frūct-eu-ai*, whence regularly *frūctūī*. The Dative in *-ū* is not formed from that in *-uī* by contraction; for *-uī* does not contract to *ū*. The forms in *ū* are probably Locatives, *frūctū* being for earlier **frūcteu*, a peculiar terminationless formation, found also in Sanskrit.

164. Accusative Singular. — The regular ending *-m* is appended, e.g. *fructu-m*.

165. Ablative Singular. — The earliest Latin formation had *-d*, e.g. *fructūd*. This, however, was not inherited from the Indo-European, but was a new formation, specifically Latin. See § 153. The *-d* was soon dropped, giving *fructū*.

166. Nominative Plural. — The original formation would have been in **-eu-ēs*, i.e. the strong form of the suffix (§ 160) + the Nominative case-ending *-ēs*; **-eu-ēs* would regularly have become **-u-is*, which would have remained uncontracted. The regular Nominative Plural in *-ūs* must, therefore, be referred to another origin; it is probably an Accusative that has taken on a Nominative function. Cf. early Latin Nominatives in *-īs* from *ǐ*-stems, which are likewise Accusatives in Nominative function (§ 142).

167. Genitive Plural. — *Fructu-um*, etc., are for earlier *fructu-om*. On *-om*, see § 121. A Genitive in *-um* also occurs, e.g. *currum*, in place of *curruum*. Inasmuch as this formation appears in Plautus (long before the change of *-uom* to *-uum*; § 57. 1. c), *currum* cannot be explained as from *curruum*, but is an analogical formation after Genitives in *-um* from *ǒ*-stems (§ 132) and consonant stems.

168. Dative and Ablative Plural. — The regular Indo-European case-ending **-bhos* became Latin *-bus* (§ 97. 1. b), and was regularly appended to the stem in *u-*, e.g. *fructu-bus*. Later, either owing to the influence of consonant and *ǐ*-stems, or to the tendency of *ǔ* to become *ǐ* before labials (§ 6. 2), *-ubus* often became *-ibus*.

169. Accusative Plural. — The primitive formation would be represented by **fructu-ns* (case-ending *-ns*), whence regularly *fructūs*; § 109. 3. b.

B. NEUTER *ŭ*-STEMS.

170. These are not numerous and present few peculiarities. The long *u* of *genū* and *cornū* has been explained as being possibly an original dual formation, — ‘two knees,’ *etc.*

ī and *ū*-Stems

171. 1. The only *ī*-stem in Latin is *vīs*. The terminations of the Singular follow those of *ī*-stems; *ī* has probably been shortened in the Genitive, though the actual quantity cannot be proved. The Accusative *vīm* for **vīm* is regular; § 88. 2. In the Plural, *vīrēs*, *vīrium*, *etc.*, result from the conception of the stem as *vīs-*, whence **vīs-ēs*, *vīrēs*, *etc.*; § 98. 1.

2. *ū*-stems are represented by *sūs* and *grūs*, both of which take the endings of consonant stems, shortening *ū* regularly to *ŭ* before vowels. *Sūbus* is not a contraction of *suibus*, but represents the original formation; *sūbus* and *suibus* are the result of analogy.

īē-Stems.

172. *īē*-stems are represented by nouns in *-iēs*, *e.g.* *rabiēs*, *aciēs*, *factēs*, *speciēs*, *etc.* The suffix *-iē-* originally had Ablaut (§ 70) in Indo-European, appearing in the forms *-ī-* and *-iē-*; but Latin has lost all traces of the *ī*-suffix and has *-iē* throughout. Two original *s*-stems (*spēs* and *fidēs*) have also adapted themselves to the same declension as the *-iē*-stems, along with *rēs* and *dīēs*, which were originally diphthong stems; see § 180.

172^a. Nominative Singular. — The case-ending is *-s* as elsewhere.

173. Genitive Singular. — The primitive Genitive of the *-iē* stems ended in *-s*, *e.g.* *rabiēs*, Lucretius, iv. 1083. But the regular termination is *-ēi*. The *ī* of this is probably borrowed

from *ǵ*-stems, precisely as in case of the ending *-āi* of *ā*-stems ; subsequently *ē* was regularly shortened before *-i*, when a consonant preceded the termination, *e.g.* *fidēi*, *spēi*, *rēi*, *plēbēi*, though in early Latin, forms like *fidēi*, *rēi* are found. A Genitive in *-i* also arises by the contraction of *ēi* to *-ei*, whence *-i*, *e.g.* *perniciū*, *dū* (Virgil, *Aen.* i. 636). The ending *-ē*, *e.g.* *aciē*, *diē* (in such expressions as *quīnti diē*, *postrīdiē*, *prīdiē*, *etc.*), is not Genitive, but a Dative-Locative formation ; see § 174. The original formation was **diēi*. But under certain conditions this diphthong *-ēi* became *-ē* (*cf.* § 86) ; hence *diē* for **diēi*.

174. Dative Singular.—In the Indo-European parent-speech the Dative and Locative seem to have become merged in a single formation in *-ēi* (long diphthong) ; whence *-ē* (§ 173). But for the most part this original Dative in *-ē* has been supplanted by the Dative in *-ēi*, a new formation modelled on the Datives of consonant stems.

174^a. Accusative Singular.—This is formed regularly by appending the case-ending *-m*, before which *ē* is regularly shortened (§ 88. 2), *e.g.* *aciem* for earlier **aciēm*.

175. Ablative Singular.—No traces of forms with *-d* are found, though it is likely that *aciē*, *etc.*, are for an earlier **aciēd*, *etc.* This formation would be secondary, after the analogy of the Ablative Singular of *ǵ*-stems.

176. Nominative Plural.—The Nominative case-ending *-ēs* (see § 142) combines by contraction with the stem, *e.g.* *aciēs* for **aciē-ēs*.

177. Genitive Plural.—The termination *-ērum* is after the analogy of *-ārum* of the *ā*-stems and *-ōrum* of the *ǵ*-stems.

178. Dative and Ablative Plural. — The ending *-bus*, for Indo-European *-bhos* (§ 97. 1. *b*), is appended directly to the stem.

179. Accusative Plural. — The primitive Latin formation would be represented by **aciēns*, whence *aciēs* (§ 109. 3. *b*).

Stems ending in a Diphthong.

180. 1. *Rēs*, originally a diphthongal stem, viz. **rēis*, had become *rēs* in the Indo-European period.

2. The Nominative Singular of *nāvis* was originally **nāus*. This form disappeared; *nāvis* is a new formation after the Genitive *nāvis*, Dative *nāvī*.

3. *Bōs* is probably not a genuine Latin word, but is borrowed from one of the Italic dialects (Oscan?); *ō* represents earlier *ōu*. The oblique cases are formed from the stem *bou-*, *u* becoming *v* between vowels. The Dative Plural *būbus* is regular (for **boubus*); *bōbus* is modelled on the Nominative *bōs*.

4. The stem of *Jū(piter)* was, in Indo-European, **Djev-*. Initial *dj* regularly became *j* (§ 104. 1. *a*); hence **Djev-* became **Jev-*, and further *Jov-* (§ 73. 3). From this stem are formed the oblique cases *Jov-is*, *Jov-ī*, *Jov-em*. The Vocative consisted of the simple stem, namely **Jev*, which became **Jeu*, *Jū-* (§ 85). It is this last which, combined with *-piter* (i.e. *pater*, § 73. 2), gives *Jūpiter* (*Juppiter*, § 88. 1), really a Vocative, but used as a Nominative as well.

The original Nominative was **Djēus*, with a 'by-form' **Dijēus*, 'god of the sky,' 'god of day.' From the latter came the common noun *diūs*, 'day,' preserved in *nudiūstertius*, 'now the third day,' 'three days ago' (§ 86). But after the analogy of the Accusative *diem*, there arose also the Nominative *Diēs* seen in the archaic *Diēspiter*, which is the real Nominative corresponding to *Jūpiter*. This same *diēs*, as a common noun, 'day,' passed over into the inflection of the *iē*-stems.

FORMATION OF THE COMPARATIVE AND SUPERLATIVE.¹

181. The Comparative. — 1. The regular Comparative Suffix in Latin was *-jos-* ('protracted form' *-jōs-*; § 62. 3), with *-jes-* as another form of the strong grade, and *-is-* as weak grade (§ 62). But *-jos-*, *-jōs-* alone² survived in Latin. In the Nominative Masculine and Feminine the original formation was *-jōs*. Following a consonant, *j* regularly became *i* (§ 103. 2), and in the oblique cases *s* became *r* (§ 98. 1), e.g. *melīoris* for **melīōsis*; the *r* was subsequently transferred by analogy to the Nominative. The Neuter took the suffix *-iōs-* and kept *s*, changing *o* to *u* (§ 76. 5), e.g. *melius*. *Minus* is not for **min-ios* (which would be impossible in Latin), but was probably originally a Noun, **minvos*, whence **minos* (§ 103. 5), *minus*, Gen. **mineris*. This became an Adjective and developed a Masculine *minor*, after the analogy of other Comparatives.

2. The Indo-European parent-speech had another suffix, which in some languages developed Comparative force, viz. *-tero-*, *-terā-*, e.g. Greek *κακώ-τερος*. But in Latin this suffix retained its primitive force of 'having a relation to,' 'connected with,' e.g. *ex-terus*, lit. 'having a relation to the outside, outer'; **interus*, *posterus*, *citer*, etc. These were felt as Positives and took the regular suffix *-ior-* to denote Comparative relation.

3. *Plus* is for **plō-is*, from the root *plē-*, *plō-*, 'fill,' 'full' (§ 62). This **plōis* became **plois* (§ 86), whence *plūs* (§ 81. 1). In the archaic hymn known as the Song of the Arval Brothers we find the form *PLEORES* from *plē-*, the other phase of the root.

182. The Superlative. — We have three Superlative suffixes in Latin :

¹ See Lindsay, *Latin Language*, p. 404; Stolz, *Lateinische Grammatik*³, § 92; Sommer, *Handbuch der Lateinischen Laut- und Formenlehre*, §§ 302 ff.

² *-is* appears in *plūs* (see 3, below) and in the Adverbs *mag-is*, *nim-is*.

1. *-mo-*, *-imo-* seen in *sum-mus* for **sub-mus* (§ 106. 2); *pri-mus*; *brūma* 'winter,' lit. 'shortest day,' for **breu-ma* (*brev-is*); *pessimus*; also in *extrē-mus*, *postrē-mus*; *suprē-mus*; *plūr-imus*, *prox-imus* (for **proqu(i)simus*); *max-imus* (for **mag(i)s-imus*).

2. *-tumus*, *-timus* (§ 6. 2), seen in *ci-timus*, *ex-timus*, *in-timus*, *pos-tumus*, *ul-timus*, *op-timus*, for *op(i)timus*, from *ops* (§ 92); earlier *citumus*, etc. This suffix originally had much the same meaning as *tero-*, *terā-* (see § 181), and still retains its primitive force in several words, e.g. *lēgi-timus*; *fīni-timus*, etc.

3. The suffix *-issimus* is of uncertain origin. It can hardly be for *-istimus*, a mingling of *-isto-* (seen in the Greek Superlative ending *-ιστος*) and *-mus*; for *-istimus* could not become *-issimus*. No plausible explanation of the suffix has as yet been offered. *Ācerrimus* is probably for an original **ācr-is-imos*, whence by Syncope (§ 92) *ācr̄simos*, **ācersimos* (§ 100. 3), *ācerrimus* (§ 106. 4). Similarly *facillimus* is for **fācil-is-imos*, **facilsimos*, *facillimus* (§ 106. 3); *-is-*, in the forms assumed as original, represents the weak form of the Comparative suffix (§ 181). Cf. Brugmann, *Grundriss*, ii. p. 158.

4. On the quantity of *i* in *-issimus*, see § 43.

NUMERALS.¹

Cardinals.

183. 1. *Ūnus* is for earlier *oinos*; § 81. 1. (cf. Gr. *οἷνῃ*, the 'one-spot' on dice). German *ein* and English *one* are the same word; Greek *εἷς* for **σεμ-s* is not related to *ūnus*, but to *semel*, *singulī*.

2. *Duo* is for earlier **duō* according to § 88. 3; cf. Gr. *δύω*. The formation was Dual.

¹ See Brugmann, *Grundriss*, ii. §§ 164–181; Lindsay, *Latin Language*, pp. 408 ff.; Stolz, *Lateinische Grammatik*³, § 91; Sommer, *Handbuch der lateinische Laut- und Formenlehre*, §§ 306 ff.

3. **Trēs.** The stem shows Ablaut (§ 64. c), strong grade *trei-*, weak grade *tri-*. The former stem originally appeared in the Nominative, **trej-ēs*, whence **tre-ēs*, *trēs*. The other cases have *tri-*, viz. *tri-um*, *tri-bus*, *tri-a*, *trīs* (for **tri-ns*; § 109. 3).

4. **Quattuor.** The Indo-European form from which *quattuor* is descended was probably **quetvōrēs*; but the Latin form early lost its inflection, after the analogy of the other indeclinable numerals; *-ōr* regularly became *ōr*; § 88. 3. The change of the primitive *e* to *a*, and the doubling of the *t* cannot be referred to any recognized law. The change of *v* to *u* is perfectly natural; cf. § 16. 1. f.

5. **Quīnque.** The Indo-European form was **penque*; cf. Skrt. *panca*, Gr. *πέντε*. Initial *qu-* in Latin is the result of assimilation of the first syllable to the second; cf. *bi-bō* for Indo-European **pi-bō* (Skrt. *pibāmi*). The change of *e* to *i* is in accordance with § 73. 2. b. The long *i* is probably borrowed from *quīntus*, for *quīnctus*.

6. **Sex.** This comes from Indo-European **sex*, a by-form of **svex*, seen in Greek *ἕξ*, Doric *ῥέξ* (for *σῥέξ*).

7. **Septem.** The Indo-European form was **septm̥*, which regularly developed in Latin as **septem* (§ 102. 1).

8. **Octō** is descended from an Indo-European **octō*. The form was a Dual ('two sets of fingers'; root *ac-*, *oc-*, 'sharp,' 'pointed?').

9. **Novem.** The Indo-European form was **nev̥n̥*, which in Latin would regularly have appeared as **noven* (§ 102. 1; cf. Eng. *ni-ne*; German *neu-n*); *-em* for *-en* is probably due to association with the following *dec-em*.

10. **Decem** is for Indo-European **dek̥m̥*; § 102. 1.

11. '**Eleven**' to '**Nineteen**.' These are regularly formed by composition, — *ūndecim*, *tredecim*, etc. On *-im* for *-em*, see § 73. 2. For *trēdecim* we should expect **trēdecim* according to § 89 (cf. *sēdecim* for **sec(s)decim*; § 105). The *ē* remains

unexplained. 'Eighteen' and 'Nineteen' were usually expressed by *duodēvīgintī*, *undēvīgintī*.

12. **Vigintī.** The Indo-European form was **vī-kṃtī*, in which *vī*, 'two,' is for **dvī*, an original Neuter Dual, from the root **du-*; **kṃtī*, whence in Latin **-gentī*, *-gintī* (§ 102. 1) was also Dual, in the sense of 'tens.' The change of *k* to *g* is peculiar, though not unexampled; cf. *dig-itus* for **dic-itus* (from root *dic-* 'point').

13. '**Thirty**' to '**Ninety**.' These all end in *-gintā*, which in Indo-European was **-kontā* (cf. Gr. *τριάκοντα*, *τεσσαράκοντα*, etc.), a Neuter Plural meaning 'tens'; **-kontā* shows the strong grade of the root whose weak grade **kṃt-* lies at the basis of *vīgintī* (see above); *-gintā* for **gontā* is due to the influence of *vīgintī*. The *-ā* is a vestige of the original ending mentioned in § 136. On *g* for *c*, see above. *Trī-* in *trīgintā* is probably a Nominative Plural Neuter. The *-ā* in *quadrā-*, *quīnquā-*, *sexā-* is secondary. Its precise origin is uncertain. As regards *quadrā-*, it is best to disconnect it entirely from *quattuor*. It is probably an independent word.

14. **Centum** is for an Indo-European **cṃtóm*, whence the Latin form by regular phonetic process; § 102. 1. Eng. *hund-* in *hundred* is the same word. Gr. *ἑκατόν* has prefixed *ἐ-*, for *-έν*, 'one.'

15. **The Hundreds** present few difficulties. *Trē-centī* is for **trī-centī* by assimilation (§ 90). *Quadrīngentī*, *octīngentī* (for *quattuor-*, *octō-*) have borrowed the *-ing-* from *quīngentī* (for **quīng-gentī*; § 105. 1) and *septīngentī* (for **septem-gentī*), where *-ing-* developed regularly. *Sescentī* is for *sex-centī*, according to § 105. 1. *Sexcentī*, which also occurs, is the result of 'Re-composition'; § 87. 3. On *g* for *c* in *-gentī* see above, 12.

16. **Mille.** — The most probable etymology of this word is that which connects it with Greek *χίλια*, Doric *χήλια* (for **χέσλια*), 'thousand.' The Indo-European form of this was **gheslia*, which in Latin would regularly develop as **hēlia* (§§ 89; 97. 3. A.), and, by assimilation (§ 90), **hīlia*. The initial *m* would repre-

sent *sm-*, weak form of the root *sem-*, 'one,' seen in *sem-per sem-el*, *sim-plex*, *sin-gulī*. Cf. also Greek $\mu\acute{\alpha}$ for $*(\sigma)\mu\acute{\alpha}$. Hence originally in Latin **sm(h)ilia*, 'one thousand.' On *m* for initial *sm-*, see § 104. 1. *b*).

Ordinals.

184. 1. **Primus** for **prīs-mos* (cf. *prīs-cus*, *prīs-tinus*) is a Superlative formation; § 89.

2. **Secundus** (for **sequondos*; § 103. 5) is from *sequor*; hence originally: 'the following.'

3. **Tertius** may be for **trī-tios*, whence by Syncope (§ 92) **tr̥tios*, then *tertius* (100. 3).

4. **Quārtus**, **Quīntus**, **Sextus** are formed from the respective cardinals by adding *-tus*. The route followed in the development of *quārtus* is too devious to be here described.

5. **Septimus**, **Decimus** are probably for an original **septm-mos*, **dec̣m-mos*. Before *m*, *ṃ* developed into the sound variously represented by *u*, *ī*; § 6. 2.

6. **Octāvus** is for an earlier **octōvus*.

7. **Nōnus** is for **noven-os*; cf. § 183. 9.

8. **Vicēsimus** and the other tens are formed with the suffix *-timo-*, i.e. *vīcēsimus*, earlier *vīcēnsimus*, for **vicent-timos*; § 108. 1.

9. **Centēsimus** and the **Hundreds**. — Inasmuch as the element *-ēsimus* was common to all the tens, it came to be felt as an independent ordinal suffix, and was appended to the stems of the hundreds, *centum*, *ducentī*, etc. The suffix *-timo-* would have given **centum-timus*, or else **cēsimus* for **cent-timus*.

10. **Millēsimus** follows the analogy of the hundreds.

Distributives.

185. 1. **Singulī** shows the weak form of the root *sem-*, 'one,' seen in *sem-el*, 'once,' *sim-plex*, *sem-per*, etc. The origin of the suffix *-gulī* is not clear.

2. The other Distributives are formed with the suffix *-no-*, e.g. *bīnī* for **bis-nī*; *trīnī* for **tris-nī*. Beginning with *septēnī*, the Distributives are formed by the suffix *-ēnī*, which is borrowed from *sēnī* (for **secs-nī*; §§ 105. 1; 89). The cardinal form to which this suffix is added, usually loses its final syllable, sometimes the last two syllables, e.g. *sept(em)ēnī*, *nov(em)ēnī*; *dēnī*, *vīcēnī*.

Multiplicatives.

186. 1. **Semel**, 'once,' is from the root *sem-*; § 185. 1.

2. **Bis** is for *dis*, preserved in the Glosses of Festus; § 104.

2. c). Cf. Greek *δῖς*. For Latin *dis*, see § 104. 2.

3. **Ter** is for **tris* (cf. Gr. *τρίς*) in unaccented position. The sequence of development would be **tris*, **trs*, **trr*, *ter*; §§ 106. 3; 100. 3.

4. **Quater** is possibly for **quatrus*, **quatr̥s*, *quater(r)*; § 100. 3.

5. The other Multiplicatives are formed by the suffix *-iēns*, *-iēs* (see § 20. 2), which is variously explained. Some see in it the Participle of *eō*, so that *sex-iēns* would mean literally 'going six.' Others identify it with the Sanskrit suffix *-yant*, 'great.'

PRONOUNS.¹

PERSONAL PRONOUNS.

187. **First Person.** — 1. *The Nominative Singular, ego*, for earlier *egō* (§ 88. 3), represents an Indo-European **egō*.

2. *The Genitive Singular, meī*, is simply the Genitive Singular Neuter of the Possessive *meus*, used substantively. By the side of *meī* we have also in early Latin the Genitive *mīs*. This probably goes back to an Indo-European Genitive-Dative-Local

¹ See Brugmann, *Grundriss*, ii. §§ 407-459; Lindsay, *Latin Language*, chap. vii; Stolz, *Lateinische Grammatik*,³ §§ 89, 90; Sommer, *Handbuch der Lateinischen Laut- und Formenlehre*, §§ 266 ff.

tive form **mei* or **moi*, whence **mī*. To this was added the Genitive termination *-s*.

3. *The Dative Singular, mihi*, is probably descended from an Indo-European **megh-oi* or **megh-ei*, Locative. This would regularly appear in Latin as **mehī* (§§ 97. 3. A; 81. 2). The change of *ě* to *ī* took place first when **mehī* was in unaccented position; § 73. 2. On the shortening of the final *ī*, see § 88. 3. *Mī* may be a contraction of *mihi* or may be identical with Greek *μοί* (also Locative).

4. *The Accusative and Ablative Singular, mē*, was *mēd* in early Latin. Originally *mēd* was Ablative only, with the case-ending discussed in § 130. Before an initial consonant *mēd* would become *mē*, remaining *mēd* before vowels. The original Accusative Singular was *mē*, but the existence of *mē* and *mēd* side by side in the Ablative naturally led to the rise of *mēd* by the side of the already existing *mē* in the Accusative.

5. *Nominative and Accusative Plural, nōs*, is apparently an inherited Indo-European formation. The form was originally Accusative and was thence transferred to the Nominative also.

6. *Genitive Plural*.—*Nostrī, nostrum* are the Genitive Singular and Genitive Plural of the Possessive Pronoun used with substantive force. In early Latin we find also *nostrōrum* and (as Feminine) even *nostrārum*.

7. *Dative and Ablative Plural*.—*Nōbīs* has apparently borrowed its termination *-bīs* from *vōbīs*; see below.

188. Second Person.—The Indo-European stem was *tve-*, with weak grade *tū-*. A collateral form *te-* also appears.

1. *Nominative Singular*.—*tū* corresponds to German *dū*, Greek *τῦ* in Homeric *τῦνῆ*.

2. *Genitive Singular*.—*Tuī* like *meī* (§ 187. 2) is the Genitive of the Possessive Pronoun used substantively. Early Latin has also a Genitive *tīs* to be explained like *mīs* (see § 187. 2).

3. *Dative Singular*. — *Tibi* is for an earlier **tebhei*, **tebī*, *tibī*; on *ī* for *ē*, see under *mihi*, § 187. 3. On the shortening of the final *-ī*, see § 88. 3. The origin of the termination *-bhei* is uncertain.

4. *Accusative and Ablative Singular*. — In both Accusative and Ablative we have *tē*, with *tēd* as an alternative form in early Latin. On the origin and relation of the two formations, see § 187. 4.

5. *Nominative and Accusative Plural*. — *Vōs* represents an Indo-European formation. Like *nōs* (§ 187. 5), it was originally Accusative only.

6. *Genitive Plural*. — *Vestrum*, *vestrī* are of the same formation as *nostrum*, *nostrī*; see § 187. 6. *Vostrum*, *vostrī*, for *vestrum*, *vestrī*, result from association with *nostrum*, *nostrī*.

7. *Dative and Ablative Plural*. — *Vōbīs* is formed with the suffix *-bhīs*, the relation of *-bīs* in *vō-bīs* to *-bī* in *tī-bī* being perhaps determined by that of *illīs* to *illi*; *istīs* to *istī*, etc.

THE REFLEXIVE PRONOUN.

189. The stem of the Reflexive is **sev-*, with the collateral forms **se-*, *sv-*.

1. *Genitive*. — *Suī*, like *meī* and *tuī*, is the Genitive Singular of the Possessive used substantively.

2. *Dative*. — *Sibi*, earlier *sibī*, is for **sebhei*, **sebī*. See under *mihi*, § 187. 3. On the shortening of the final *ī* see § 88. 3.

3. *Accusative and Ablative*. — In both Accusative and Ablative we have *sē*, with *sēd* as an alternative form in early Latin. On the origin and relation of the two formations, see on *mē*, § 187. 4.

THE POSSESSIVE PRONOUNS.

190. These are formed by appending *-os* (*-us*) to the stems or other form of the Personal Pronouns.

1. *Me-us* is formed by adding the suffix *-os* to **mei*, the Indo-European Genitive form mentioned in § 187. 2. This **mei-os*

regularly became *meus*. The Vocative Singular *mī* is either the old Genitive *mī*, or is for **mei-e*, which by loss of its *-ē* might become **mei*, *mī*.

2. *Tu-us* is from the stem *tev-*, whence originally **tev-os*, later *tovos* (§ 73. 3), preserved in early Latin. In enclitic position *ov* became *u*, whence *tuos*, *tuus*; see § 103. 4. With Latin **tev-os*, cf. Homeric Greek τε(ν)ός.

3. *Su-us* is from the stem *sev-*, whence originally **sevos*, later *sovos* (73. 3), preserved in early Latin. In enclitic position, e.g. *pátrem sovom*, *ov* became *ŭ*, whence *suos*, *suus*; see § 103. 4. With primitive Latin **sev-os* cf. Homeric Greek ἑφός for **σεφός*. The weak form of the root *sev* was *sv-*. It is this which appears in Greek *ός* for *σφός*, and traces are present also in Latin, e.g. in such forms as *sīs* (Dat.-Abl. Plu.), for **svīs* (root *svo-*), found in early Latin.

4. *Noster* and *vester* are formed by adding the suffix *-tero-* to *nōs-* and *vōs-*, with Syncope of the *e*; cf. Gr. ἡμέτερος. The suffix is the same as that already considered 181. 2, and had the meaning 'connected with,' 'having a relation to.' The early form *voster* became *vester* according to § 76. 3.

THE DEMONSTRATIVE PRONOUNS.

Hic.

191. 1. The stem of *hic* was *ho-*, *hā-*. To the regular case-forms of this stem was often added the suffix *-ce*, frequently reduced to *-c*; *-ce* itself represents a pronominal stem meaning 'here.'

2. Nominative Singular.

a) Masculine. *Hic* is now explained as for **ho-ce*. In unaccented (i.e. enclitic) use, this would regularly become **hice*, whence *hic* (§ 76. 4). The element *ho-* is thought originally to have been a Nominative form of the same type as Indo-European **so* (Skrt. *sa*, Gr. *ὁ* (for **σο*), Gothic *sa*), i.e. a Nominative consisting

of the stem alone without case-ending. The *i* of *hic* was thus short by origin, and the word always has *ī* in Plautus. Where we find an apparent *ī* in later times, we should probably read *hīcc*; i.e. the syllable is long, but the vowel is short. An instance of *hīcc* occurs in CIL. ix. 60, HICC EST. This *cc* comes from *hocc*. See below, *c*).

b) Feminine. *Haec* for **hā-i-c(e)*, adds *i* (a formative element recognized elsewhere in the inflection of this pronoun) to an original **hā* (cf. **portā*).

c) Neuter. *Hoc* is for **hocce*, earlier **hod-c(e)*, in which *-d* is a case-ending peculiar to the Pronominal Declension. The *ō* of *hoc* was short. Whenever the word makes a long syllable in verse before an initial vowel it is probable that the Romans pronounced *hocc*, e.g. *hocc erat* in Mss. of Virgil, *Aen.* ii. 664. Before consonants they pronounced *hōc*, e.g. *hōc templum*.

3. *Genitive Singular*.—The earliest form of the Genitive Singular was **hoij-os*, whence *hoi(j)us*, preserved in early Latin. The exact nature of this formation is still far from clear. The classical form *hūjus* seems most likely to have developed from *hoi-(j)us* in accordance with § 81. 1.

4. *Dative Singular*.—The original form of the Dative Singular was probably **hoijei*, a Locative formation that took on Dative function. From this, by disappearance of the intervocalic *j* (§ 103. 1) and contraction, arose the earliest Latin form, viz. HOICE, CIL. i. 197. 26. The exact way in which *huic* arose is uncertain.

5. *Accusative Singular*.—*Hunc, hanc* are simply for earlier **ho-m-ce*, **ha-m-ce*, with obvious phonetic changes.

6. *Ablative Singular*.—*Hōc, hāc* for earlier **hōd-c(e)*, **hād-c(e)* represent the same Ablative formation as regularly seen in *ā-* and *o-*stems; §§ 118, 130.

7. *Plural Forms*.—These all follow the regular termination of *ā-* and *o-*stems, except the Nominative and Accusative Plural Neu-

ter, *haec*, where *-ai*, *-ae* (instead of *-a*) exhibit the same *ǐ* as noted above in connection with the Nominative Singular Feminine.

Is.

192. 1. The root of this pronoun is *ei-*, weak form *ǐ-* (§ 62). By appending the suffixes *-o-* and *-ā* we get the stems *ejo-*, *ejā-* or (by disappearance of the intervocalic *j*) *eo-*, *eā-*.

2. Nominative Singular.

a) Masculine. *Is* shows the root in the weak form with the case-ending *-s*.

b) Feminine. *Ea* is for **ej-ā*; see above, 1.

c) Neuter. *Id* shows the weak form of the root with the Pronominal case-ending *-d*.

3. *Genitive Singular*. — The original formation is thought to have been **eijos*, whence *eius*, the correct classical form; cf. § 82. 3.

4. *Dative Singular*. — *Eī* for **e-ei*, earlier **ej-ei* was in formation a Locative from the stem *ějo-* (see 1). In the Pronouns the Locative served also as Dative.

5. *Accusative Singular*. — *Eum*, *eam* represent an earlier **ějom*, **ějam*, (see 1).

6. *Ablative Singular*. — *Eō* and *eā*, earlier *eōd*, *eād*, were formed from the stems **ějo-*, *ějā-*. The case-ending is the same as that of *ā-* and *ǝ-*stems.

7. *Plural Cases*. — These are all formed regularly from the stems **ějo-*, *ějā-*. In the Nominative Plural, *eī* (for **ej-oi*) represents the original formation; *iī* is for *eī* by assimilation (§ 90); *ī* is from *iī* by contraction. Cf. also the corresponding Dative-Ablative forms, *eīs*, *iīs*, *īs*.

8. *Idem* is simply *is* with the suffix *-dem*. For the Compensatory Lengthening, see § 89. 1.

Iste, Ille, Ipse.

193. These three pronouns presumably contain in their second syllable the Indo-European pronoun **so*, 'he'; **sā*, 'she'; **tod*, 'that.' But by association and analogy the second element has become much modified.

194. *Iste*. The first syllable of *iste* is of uncertain origin. It was apparently an unchangeable element. By the addition of **so*, **sā*, **tod*, would arise **isso*, **issā*, **istod*. The regular Accusative of **so* was **tom*, **tām*, **tod* (cf. Greek *τόν*, *τάν*, *τό(δ)*), whence **istom*, **istām*, **istod*. The preponderance of forms with *t* eventually caused **issa* to become *ista* and **isso* to become **isto*, later *iste* (§ 76. 6), influenced by *ille*, *ipse*.

195. *Ille*. If *olle* was the original of *ille*, as is usually held, the change from *o* to *i* can be accounted for only on the ground of adaptation to such forms as *iste*, *ipse*, *is*. *Olle*, itself, may be for **ol-so*, **ol-se*, whence *olle* (§§ 76. 6; 106. 3). The Feminine would similarly have been **ol-sā*, *olla*. The Neuter would have been **ol-tod*, and the Accusative **oltom*, **oltām*, **oltod*. Then the forms with *ll* might naturally have gained the supremacy over those with *lt*.

196. *Ipse*. *I-* here seems the root of *is* (cf. early Latin *eāpse*, *eumpse*, *eōpse*, etc.), while the origin of the suffix *-pse* is obscure. The Neuter, *ipsum* (instead of **ipsud*), shows transition to the Noun Declension.

197. Declension of *Iste*, *Ille*, *Ipse*. — With the exception of the forms *istud*, *illud* already mentioned, and the Genitive and Dative Singular, these all show the usual terminations of the Noun Declension. The Genitives *istiūs*, *illiūs*, *ipsiūs* are formed by appending the Genitive ending *-os* (*-us*) to *istī*, *illī*, *ipsī*, Locatives

from the stems *isto-*, *illo-*, *ipso-*. These Locative formations served originally as both Dative and Genitive in the Pronouns. Later the Genitive was differentiated from the Dative.

The Relative, Interrogative, and Indefinite Pronouns.

198. 1. These are all formed from the same root, which appears as *quī-*, *quō-*, *quā-*.

2. *Nominative Singular*. — *Quis* shows the stem *qui-* with the case-ending *-s*. *Quī* is for *quo* + *i*, a formative element which appears elsewhere in the Pronominal Declension (see under *hic*, § 191. 2. *b*) ; 7) ; *oi* in accented syllables regularly becomes *ū*, but *ī* for *oi* in *quī* may perhaps be explained by the enclitic character of the word. *Quae* is the regular Feminine of the Relative. The formation is the same as seen in *hae-c* (§ 191. 2. *b*). *Qua*, which appears in the Indefinite Pronoun, follows the Noun Declension. *Quo-d* and *qui-d* append the regular pronominal termination to their respective stems.

3. *Genitive Singular*. — *Cūjus*, for earlier *quoi(j)us*, **quojos*, seems best explained like *hūjus*; § 191. 3.

4. *Dative Singular*. — *Cui* seems to have developed in the first century of the Christian era from the earlier *quoi*; see § 14. *Quoi* was probably a Locative formation.

5. *Accusative Singular*. — *Quem* for **qui-m* has followed the analogy of *ī*-stems having *-em* for *-im*, e.g. *turrem*, *ovem*, etc.; § 152.

6. *Ablative Singular*. — Besides the regular *quō*, *quā*, *quō*, which present no peculiarities, we find *quī* used for all genders and (in early Latin) for both numbers. This may have been a genuine Ablative form (*quī* for **quīd*), or an Instrumental.

7. *Plural Forms*. — *Quae* is analogous to *hae-c*; § 191. 7. The Dative and Ablative *quīs* is from the stem *quo-* (§ 133); it has no formal connection with *qui-bus*, which is from the stem *quī-*.

Pronominal Adjectives.

199. Several Adjectives of pronominal meaning have adopted also the Pronominal Declension in the Genitive and Dative Singular, *viz. alius, alter; uter, neuter; ūllus, nūllus; sōlus, tōtus, ūnus.* *Alius* takes also the pronominal *-d* in the Neuter Singular.

CONJUGATION.¹

INTRODUCTORY.

200. As compared with Greek and Sanskrit, the Latin in its verb-system exhibits extensive deviations from the original conjugational system of the Indo-European parent-speech. The following are the most important points of difference :

1. The Latin has lost the augment, *i.e.* an initial *e-*, prefixed to the secondary tenses of the Indicative as a symbol of past time.

2. The strong (*i.e.* unsigmatic) Aorist has disappeared almost entirely.

3. The original Perfect Indicative has become merged with the sigmatic Aorist. The result is a tense whose inflections are derived from both sources, and whose meanings are Aoristic as well as Perfect.

4. The original Middle Voice has disappeared, being superseded by a new inflection peculiar to Latin and Keltic.

5. The Subjunctive and Optative do not appear as separate moods, but have become fused into one, designated Subjunctive.

6. In the Imperfect and Future Indicative of the *ā-* and *ē-* conjugations we meet new formations in *-bam* and *-bō*, which, like the *r*-Passive, are peculiar to Latin and Keltic.

¹ See in general: Brugmann, *Grundriss*, ii. §§ 460-1086; Lindsay, *Latin Language*, chap. viii.; Stolz, *Lateinische Grammatik*³, §§ 96-118; Sommer, *Handbuch der Lateinischen Laut- und Formenlehre*, §§ 317-391.

7. In the Personal Endings the distinction between primary and secondary endings has become effaced.

8. Several new tense-formations have developed which are peculiar to Latin, *e.g.* the Perfect Indicative in *-vī* and *-uī*, the Pluperfect Subjunctive in *-issem*, *etc.*

FORMATION OF THE PRESENT STEM.

201. Thematic and Unthematic Formation.—The Latin inherited two distinct types of Present formation. The one, characterized by the presence of the variable or thematic vowel (*ě, ō*) before the Personal Endings, is called Thematic. This type is illustrated by *dīcu-nt* (for **dīco-nt*); *dīci-tis* (for **dīce-tis*). The other type of Present formation has no thematic vowel, and hence is called Unthematic. Unthematic presents originally had Ablaut (§ 62). The strong form of the root appeared in the Singular, the reduced form in the Plural. This change was connected with primitive accentual conditions. Presumably the accent originally rested on the root syllable in the Singular, on the endings in the Plural.

In Greek, the Unthematic Conjugation is represented by the *-μι* verbs (*τί-θη-μι, τί-θε-μεν*), while *-ω* verbs are thematic, *e.g.* *λέγ-ο-μεν, λέγ-ε-τε*.

Classification of Present Formations.

A. UNTHEMATIC PRESENTS.

202. Unthematic Presents are but scantily represented in Latin; for the most part they have passed over into the thematic inflection. The following verbs are the chief representatives of the class:

- I. **Dō**,¹ *dā-s, dāt* (for earlier *dāt*); Plural *dā-mus, dā-tis, dānt*.

¹ For the personal endings in this and the other verbs, see §§ 235 ff.

2. **Eō.** — The two forms of the root were *ei-* (strong), and *-i* (weak). The primitive inflection for Latin, therefore, would have been theoretically somewhat as follows :

<i>*ej-ō¹</i>	<i>*ī-mos</i>
<i>*ei-s</i>	<i>*ī-tis</i>
<i>*ei-t</i>	<i>*i-nt</i>

In the First Singular **ejō* regularly became *eō* (§ 103. 1); **eis* became *īs* (§ 82); and **eit*, *īt*, later *īt*. The Plural seems to have abandoned early the weak form of the root in favor of the strong; *īmus*, *ītis*, *eunt*, therefore, represent **ei-mos*, *ei-tis*, *ej-ont*.

3. **Sum.** — The strong form of the root is *es-*, the weak *s-*. The original conjugation for Latin, therefore, would have been theoretically somewhat as follows :

<i>*es-m²</i>	<i>*s-mos</i>
<i>*es-s</i>	<i>*s-tis</i>
<i>es-t</i>	<i>*s-nt</i>

The historical forms show considerable deviation from this. Traces of **ess* are seen in the regular use of *es* as long in early Latin verse. The presumption is that *ess* represents Plautus's pronunciation. The First Singular *sum*, along with *su-mus* (for **so-mos*), and *sunt* (earlier *sont*) may represent a special thematic formation. The Second Plural *es-tis* is formed from the strong root, like the Second Singular. Enclitic forms *'s* and *'st* sometimes occur for the Second and Third Singular. These are often

¹ The Indo-European inflection was presumably :

<i>*ei-mi</i> (Gr. εἶμι)	<i>*i-mos</i> (cf. Gr. ἴ-μεν)
<i>*ei-si</i>	<i>*i-te</i> (cf. Gr. ἴ-τε)
<i>*ei-ti</i> (Gr. εἶσι for <i>*εἶτι</i>)	<i>*i-enti</i>

² The Indo-European inflection was presumably :

<i>*esmi</i>	<i>*smos</i>
<i>*essi</i>	<i>*ste</i>
<i>*esti</i>	<i>*senti</i>

joined in writing with a previous word, e.g. *bonust* = *bonum* 'st; *morast* = *mora* 'st. The usage is poetic and colloquial.

4. **Edō.** — Unthematic forms occur only in the Second and Third Singular, and in the Second Plural. The root shows Ablaut, appearing in some forms as *ēd-*, in others as *ēd-*, altered to *ēs-* by euphonic change, e.g. *ēst* for **ēdt*; *ēstis* for **ēdtis* (§ 108. 1).

5. **Ferō.** — *Fers*, *fert*, *fertis* show apparent unthematic forms, but in view of the fact that this verb follows the thematic conjugation in Sanskrit and Greek, it is probable that the above Latin forms arose by Syncope (§ 92).

6. **Volō.** — The only forms which are certainly unthematic are *vult*, *vultis* (earlier *volt*, *voltis*). The root in the Singular was normally **vel-* (cf. *vel-im*, etc.), but **velō* and **vel-t* became *volō*, *volt*, according to § 73. 5. The Second Singular *vīs* is not for **vel-s*, but comes from the root *vei-*, also meaning 'wish'; cf. *in-vītus*. *Volumus*, *volunt* have followed the thematic inflection with *o* for *e* according to § 73. 5. *Vultis* (earlier *voltis*) is most naturally explained as for **vlt-tis*, whence *voltis* (§ 100. 1). *Nōlō* is for **nevolō*, **novolō* (§ 83. 3) and *mālō* for **mag(e)volō*.

B. THEMATIC PRESENTS.

203. Of these there are the following classes :

I. **Root Class.** — The Present stem consists of the root in its strong form + the thematic vowel *e/o*. More exactly the root appeared in that phase of the strong grade which gave its name to the different Ablaut Series (§ 62). Thus roots of the *ē*-Series had *ē*, *ei(i)*, *eu(ū)*; those of the *ā*-Series had *ā*, etc. The *ē*-Series is most fully represented. Examples are :

ē-Series : *leg-e/o*, root *leg-*; *teg-e/o*, root *teg-*; *veh-e/o*, root *veh-*; *deic-e/o*, root *deic-* (later *dīc-*; § 82); *feid-e/o*, root *feid-* (later *fīd-*); *deuc-e/o*, root *deuc-* (later *dūc-*).

ǎ-Series : *ag-ē* / *o*., root *ag-* ; *caed-ē* / *o*., (§ 68).

ā-Series : *vād-ē* / *o*., root *vād-*.

ē-Series : *cēd-ē* / *o*., root *cēd-*.

ō-Series : *rōd-ē* / *o*., root *rōd-*.

II. Reduplicating Class.—The Present Stem is formed by prefixing to the root + the thematic vowel *ē* / *o*., a reduplicating syllable, which consists of the initial consonant of the root + *ī*. The root appears in its weak form (§ 62). Examples : *gi-gn-ē* / *o*., root *gen-* (cf. Gr. γί-γν-ο-μαι) ; *sī-d-ē* / *o*., for **sī-sd-ē* / *o*., (§ 89), root *sed-* ; also apparently originally **dī-dō* (cf. *reddō* for **re-d(i)-dō* by Syncope ; § 89). *Sistō*, root *stā*, and *se-rō* for **sī-sō* (§ 98. 1), root **sē-*, do not strictly belong here. They were originally unthematic formations (cf. Gr. (σ)ῖ-στῆ-μι, (σ)ῖ-(σ)ῆ-μι), but have passed in Latin into the thematic conjugation ; *bibō* is not properly a reduplicated formation. The root was *pib-* (cf. Skr. *pibāmi* ; Gr. ἐπίβδα for **ἐπι-πίβ-δα*). The Latin word results from assimilation of *p* to *b*.

III. T-Class.—This class, like the preceding, is but sparingly represented in Latin. The root appears in its strong form, to which is appended *t-ē* / *o*.. Examples are : *nec-t-ē* / *o*., *plec-t-ē* / *o*., *pec-t-ē* / *o*., *flec-t-ē* / *o*..

IV. N-Class.—The Present Stem is formed with a nasal infix before the final consonant of the root ; to this is appended the thematic vowel *ē* / *o*.. The root appears in the weak form. Examples : *find-ē* / *o*., root *fid-* ; *rump-ē* / *o*., root *rup-* ; *jung-ē* / *o*., root *jug-*. Originally the infix was confined to the Present system, but in some words, as *jungō*, it appears throughout the entire verb, e.g. *jungō*, *jūnxī*, *jūctus*. In other verbs the nasal appears in the Perfect Indicative, though not in the Perfect Participle, e.g. *fingō*, *fīnxī*, *fīctus* ; *stringō*, *strīnxī*, *strictus*.

V. NO-Class.—To the root in its weak form is added the suffix *n-ē* / *o*.. Originally verbs of this class were unthematic.

The primitive suffix was *nū-* in the Singular, and *nŭ-* in Plural. The Personal endings were appended directly to these suffixes, so that a verb like *sternō*, for example, was once inflected :

*ster-nū-ō

*ster-nŭ-mos

*ster-nū-s

*ster-nŭ-tis

*ster-nū-t

*ster-nŭ-nt

But **ster-nu-mos* regularly developed to *sternimus*. Thus two forms of the Plural (*sternimus*, *sternunt*) were identical with the thematic inflection and hence led to *sternō*, *sternis*, *sternit* in the Singular, after the analogy of *dīcimus*, *dīcitis*, *dīcunt* to *dīcō*, *dīcis*, *dicit*. Other examples are *sper-nō*, *tem-nō*, *li-nō*, *si-nō*, *tollō*, for **tl-nō* (§ 100. 1).

VI. **SCO-Class.**—The Present stem is formed by appending *scē/o-*, to the root, e.g. *hī-scō*, *gū-scō*, *crē-scō*, (*g*)*nō-scō*, *poscō* for **porc-scō*, *suēscō* for **suēd-scō*.

Many secondary formations also occur, as *gemī-scō*, *tremē-scō*; especially derivatives from contract verbs, as *flōrēscō*, from *florēō*; *lābāscō* from *lābō*; and even from nouns and adjectives, as *lapī-dēscō*, *rōrēscō*, *dūrēscō*.

The inceptive or inchoative meaning of numerous *scō-* verbs is not an inheritance from the Indo-European parent speech, but is a special development of the Latin itself. Many verbs of this formation, e.g. *nāscor*, *discō*, *poscō*, *hīscō*, etc., show no trace of the inceptive force.

VII. **JO-Class.**—The Present Stem is formed by appending the suffix *jē/o-* to a root or stem. Several different formations belong under this head, the chief of which are the following :

a) *jē/o-*-Presents from roots ending in a consonant. Here *j* becomes *i*, e.g. *jāc-iō* for **jāc-jō*; *capiō* for **cap-jō*, and all the so-called verbs in *-iō* of the Third Conjugation. Some verbs originally of this formation have passed over into the inflection of contract verbs in *-iō*, *-īre* (see *b* below), e.g. *veniō*, *venīre*.

b) *j*^e/*o*.-Presents from roots and stems ending in a vowel. The *j*, here becoming intervocalic, disappears and the concurrent vowels (except in the First Singular of *ē*- and *i*-verbs) regularly contract. Examples :

1) Monosyllabic roots : *implē-mus* for **implē-jo-mos*, root *plē*-; *intrāmus* for **intrājomos*, root *trā*-.

2) Dissyllabic verb-stems : *domāmus* for **do-mājo-mos*, stem *domā*-.

3) Noun and Adjective stems in *-ā*, *ē*, *ī* : *cūrāmus*, stem *cūrā*-; *rubēmus*, stem *rubē*-; *fīnīmus*, stem *fīnī*-.

These *ā*-contracts form the so-called First Conjugation, the *ē*- and *ē*-contracts the Second Conjugation, and the *ī*-contracts the Fourth Conjugation.

c) Causatives in *ej*^e/*o*-, e.g. *mon-eō*, *doc-eō*, *torr-eō*. These all take the *o*-phase of the strong form of the root (§ 64). They regularly suffer contraction and form a part of the Second Conjugation.

d) Verbs in *-ojō* probably once existed in Latin, but have disappeared. Thus *arō*, *arāre* was probably originally **aroō* (for **ārojō*); cf. Gr. ἀρώ. The adjective *aegrōtus* is likewise possibly to be referred to an original **aegrō*.

TENSE FORMATION IN THE INDICATIVE.

The Imperfect.

204. The termination *-bam* in the Imperfect Indicative is plausibly explained as representing an Indo-European Aorist, **bhvām*, from the root *bhu*-. This seems to have been appended to some oblique case of a noun derived from the stem of the verb. The primitive formation would be represented by **monēbhvām*, **legēbhvām*, etc. This theory of the origin of the Latin Imperfect finds confirmation in Slavonic, where the Imperfect consists of a case-form of a verbal noun + the past tense of the verb 'to be.'

Early Latin has both *-ībam* and *-iēbam* in verbs of the Fourth Conjugation. The ending *-iēbam*, however, is later in origin than *-ībam*, and was borrowed from *iō*-verbs of the Third Conjugation, e.g. *capīēbam*.

It has been suggested that the element preceding the *-bam* in the Imperfect was an old Infinitive. Cf. such compounds as *ārē-faciō*, 'to make dry.'

Eram for earlier **es-am* (§ 98. 1) exhibits the same praeterite formation as that assumed for **bhv-ām* in *amābam*, etc.

The Future.

205. 1. *The Future in -bō*.—The Future in *-bō* is analogous to the Imperfect in *-bam*, *-bō* is probably the Present of the root *bhu-*, so that *amābō* (for **amā-bhvō*; § 204) literally means 'I become loving.' Cf. the analogous German *ich werde lieben*. On *amā-*, *monē-* in this formation, see § 204. The Future in *-bō* is found also in verbs of the Fourth Conjugation in early Latin, e.g. *scībō*, *audībō*.

2. *The Future in -am*.—This formation, regular in the Third and Fourth Conjugations, is in reality a Subjunctive, or rather two Subjunctives, that have come to be ranked as Indicatives. The 1st Singular in *-am* (for **-ām*) is an *ā*-Subjunctive; the remaining forms are *ē*-Subjunctives. See §§ 221; 222.

3. *The future in -sō*.—This formation appears in such archaic forms as *dīxō*, *faxō*, which are in reality Aorist Subjunctives that have come to be ranked as Indicatives. The Future of *sum*, *erō*, is similarly a Present Subjunctive, for **es-ō* (§ 98. 1); cf. Homeric Greek εἶ(σ)ω, Attic ὦ (by contraction).

The Perfect.

THE REDUPLICATION.

206. 1. *In Verbs beginning with a Consonant*.—The Reduplication in such verbs regularly consisted of the initial consonant + *e*.

Where the root began with *sc*, *sp*, or *st*, the *sc*, *sp*, or *st* appeared in the reduplicating syllable, but the *s* was lost in the root syllable, e.g. *sci-ci-dī* (early Latin) *spo-pondī*, *ste-ti*. The reduplicating vowel, *e*, was assimilated to the root vowel when the latter was the same in the Perfect as in the Present, e.g. *mo-mord-ī*, *sci-cid-ī*, *pu-pug-ī*, *di-dic-ī*, *spo-pond-ī*; but the original forms with *e* are often found in early Latin, e.g. *memordī*, *pepugī*, *spepondi*, FHEFHAKED CIL. xiv. 4123.

The Reduplication has disappeared very largely in Latin, yet traces of its earlier presence are sometimes distinguishable, e.g. in *rettulī* for **rē-(te)tulī* (§ 92); *reppulī* for **rē-pepulī*; *repperī* for *rē-(pe)perī*; *reccidī* for **rē-(ce)cidī*. In the same way *fidi*, *scidi* represent an earlier **fefidī*, **scecidī* (cf. early Latin *scicidī*).

2. *In Verbs beginning with a Vowel.* — The Reduplication here consisted in prefixing *e*. Only a few verbs have preserved it, e.g. *ēgī* for **e-agī*; *ēdī* for **e-edī*; *-ēpī* (for **e-apī*) in *coepī*, for **co-ēpī*, root *ap-*; *ēmī* for **e-ēmī*. Some scholars refuse to recognize a Reduplication in Latin verbs beginning with a vowel, and explain the long vowel in the foregoing Perfects in other ways.

STEM FORMATION OF THE PERFECT.

A. The Primitive Perfect.

207. In the Indo-European parent-speech the accent rested on the root syllable in the Singular of the Perfect, but on the Personal Ending in the Plural. It was probably owing to these primitive accentual conditions that the strong form of the root appeared in the Singular, the reduced form in the Plural. The special phase of the strong form appearing in the Singular was that containing *ǒ* or *ō* (see the various Ablaut Series, § 62 ff.). Several of the Indo-European languages, as Sanskrit, Greek, and the Teutonic, have preserved with more or less fulness the original

Ablaut of the root in the Perfect ;¹ but in Latin there has been a uniform 'levelling' ; either the strong form has invaded the Plural (the usual sequel), or the weak form has invaded the Singular. Examples of the former process may be seen in *totondimus*, *spondimus* ; of the latter in *ce-cīd-ī*, *tu-tūd-ī*. In most Latin verbs, however, other formations have largely displaced both of those just mentioned. This has come about, partly as the result of phonetic changes, partly from the workings of analogy. The whole subject is too intricate for detailed consideration here. See Lindsay, *Latin Language*, p. 494 f.

B. The Perfect in -sī.

208. The Perfect in -sī, which appears chiefly in roots ending in labial, dental, and guttural mutes, is by origin an Aorist which has passed over to the Perfect inflection. Cf. Latin *dīx-ī* with Greek, *ἔ-δειξ-α*. Some verbs have preserved both the true Perfect and this Aorist Perfect, e.g. *pepercī* and *parsī* ; *pupugī* and (in compounds) *-punxī* ; *pepigī* and (in compounds) *-panxī*.

C. The Perfect in -vī.

209. The Perfect in -vī is a new formation which has developed in the separate history of Latin itself. The origin of this suffix is not clear ; according to one theory, -vī is borrowed from such Perfects as *fāvī*, *lāvī*, *fōvī*, *mōvī*, *vōvī*, *jūvī*, *solvī*, *volvī*, where *v* really belongs to the stem.

¹ Cf., for example, Greek

<i>οἶδ-α</i>	<i>ἴδ-μεν</i>
<i>οἶσ-θα</i>	<i>ἴσ-τε</i>
<i>οἶδ-ε</i>	<i>ἴσ-ασι,</i>

or Gothic

<i>vait</i>	<i>vit-um</i>
<i>vaist</i>	<i>vit-μῦ</i>
<i>vait</i>	<i>vit-un</i>

D. The Perfect in *-uī*.

210. The Perfect in *-uī* is a development of that in *-vī*; *-vī* is thought to have been added to extended forms of the roots e.g. **gen-e-vī* (root *gen-*), **dom-a-vī* (root *dom-*), whence *genuī*, *domuī*; § 103. 4. From forms like these the category might easily extend itself. Its diffusion was probably assisted by the existence of such Perfects as *fuī*, *pluī* — for early *fūvī* (Ennius), *plūvī* — *ruī*, *indū*, *exuī*, *imbuī*, etc.

THE INFLECTION OF THE PERFECT.

211. In its inflection the Latin Perfect presents a mingling of Perfect and Aorist forms. The exact determination of the details of this fusion furnishes one of the most difficult problems of historical Latin grammar; the following explanations can claim only a certain degree of probability.

212. The type of Perfect inflection existing in Latin prior to the fusion of Perfect and Aorist may be partially reconstructed as follows :

SINGULAR	PLURAL
1. <i>vīdī</i> ¹	<i>vīd-i-mus</i>
2. ?	?
3. <i>*vīde</i>	<i>*vīd-ent</i> (for <i>*vīd-nt</i>)

Of these forms *vīdī* in the First Singular represents an Indo-European middle, **void-ai*. The Second Singular and Second Plural cannot be conjectured with any degree of satisfaction.

213. With this true Perfect were fused certain sigmatic Aorists, viz. an *s*-Aorist and an *-is*-Aorist. These were originally unthematic, i.e. the endings were appended to the stem without the

¹ No attempt is here made to take account of the Ablaut.

help of connecting vowels (§ 201). The inflection of one of these *-is-* Aorists may be hypothetically reconstructed as follows :

SINGULAR	PLURAL
1. <i>*vīd-er-em</i> (for <i>*vīd-is-ŋ</i> ; 75. 1 ; 98. 1 ; 102. 1) <i>*vīd-is-mos</i>	
2. <i>*vīd-is</i> (for <i>*vīd-is-s</i>)	<i>*vīd-is-tis</i>
3. <i>*vīd-is-t</i>	<i>*vīd-er-ent</i> (for <i>*vīd-is-ŋt</i>)

214. Just what furnished the starting-point for the formal fusion of the two tenses is not clear ; *vīdistis* in the Second Plural is the Aorist form ; so is *vīdērunt* in the Third Plural, with **-ent* changed to *-unt* after the analogy of other tenses, e.g. *regunt*, *amāb-unt* ; *ē* (for *ě*) in *-ērunt* is of uncertain origin. Probably it was borrowed from the Perfect Third Plural in *-ēre*, which is certainly a different formation, though not at present well understood. The scansion *-ērunt*, frequent in poetry, preserves the earlier quantity. In the Singular, *vīdī* has already been explained as originally a Middle which has assumed the function of the Active. First Singular, *vīdī*, and the First Plural, *vīdī-mus*, are Perfect forms (§ 212). The Second Singular *vīdistī* is difficult of explanation. Possibly the primitive form of the Second Singular Perfect may have been **vīstī*. If so, *vīdistī* may be a contamination of **vīstī* (Perfect) and **vīdis* (Aorist), helped on by the influence of the Second Plural *vīdistis*. The assumption of a Perfect **vīstī*, however, involves difficulties. The Personal Ending of the Second Singular Perfect was *-tha* in Indo-European. Cf. Greek *οἶσθα* for **foid-θa*. In Latin *-thā* after *s* should become *-tā*. Influence of the Second Singular Middle ending **-sai* (= Latin *-sī*) has been suggested ; also of the First Singular ending *-ī*. The Third Singular **vīde* early assumed the regular Personal Ending, *-t*, of the other tenses. This gave **vīdet*, *vīdit*. Some have thought that in the true Perfect in Latin the primitive Third Singular was **vīdī* (a Middle form, like the First Singular). Some evidence in favor of this view is found in the regularly long quantity of *-īt* in early Latin poetry.

The Pluperfect.

215. The Pluperfect Indicative in *-eram* seems to have developed by proportional analogy: *vīderam* : *vīderō* :: *eram* : *erō*.

The Future Perfect.

216. The Future Perfect Indicative is an Aorist Subjunctive. Thus *vīderō* is for a primitive **veid-is-ō* (§ 75. 1; 98. 1), in which *-is-* is the same Aorist suffix as already mentioned in §§ 213, 215.

The inflection follows that of Presents in *-ō*, *-is*, *-it*, except in the 3d Plural, which has *-int* instead of *-unt*, probably owing to the influence of the Perfect Subjunctive (§ 219), which it regularly resembles in the other persons and numbers. In strictness the terminations of the Perfect Subjunctive had *-īs*, *-īmus*, *-ītis*. Hence, by confusion of the two formations, the *-ī-* sometimes appears in the Future Perfect, e.g. Horace, *Odes*, iv. 7. 20, *dederīs*.

THE OPTATIVE.

217. There were two Optative formations in Indo-European, a thematic and an unthematic. Greek *λύο-ι-μι* represents the former, *στα-ίη-ν* the latter. In Latin probably only the unthematic type is to be recognized. Owing to the thorough fusion of Optative and Subjunctive (§ 353), all Optative forms are traditionally known as Subjunctives.

218. Present Optative. — Only a few forms occur. The special suffix of the unthematic Optative was *-iē-* in the Singular, *-ī-* in the Plural.

Thus the primitive inflection of the Present Optative of the root *es-*, 'to be,' was :

SINGULAR	PLURAL
1. <i>*s-iē-m</i> (<i>siem</i> ; 88. 3)	<i>s-ī-mus</i>
2. <i>s-iē-s</i>	<i>s-ī-tis</i>
3. <i>s-iē-t</i>	<i>*s-ī-nt</i> (<i>s-i-nt</i>)

Siem, *siēs*, *siet* are common in early Latin. The classical inflection of the Singular, *sim*, *sīs*, *sit*, is formed after the analogy of the Plural. Similarly in early Latin also we find *siēm*us, *siēt*is, *sient* after the analogy of *siem*, etc. The weak form of the root, as above, regularly appeared in the Plural. Other illustrations of this Optative are *velim* (for **vel-iē-m*, after *vel-i-mus*), *nōlim*, *mālim*, *edim* (*edō*, 'eat'), *du-im*, *possim*.

219. Aorist Optative.—The so-called Perfect Subjunctive in *-erim* is by origin an Aorist Optative. The tense is formed by means of the Aorist suffix *-is-* already mentioned in §§ 213, 215, to which is further appended the Optative suffix *iē-*, *i-* (§ 218). Thus the original inflection of *vīderim* was:

**veid-is-iē-m*

**veid-is-i-mus*

**veid-is-iē-s*

**veid-is-i-tis*

**veid-is-iē-t*

**veid-is-i-nt*

By change of *ei* to *i* (§ 82), by rhotacism (§ 98. 1), and by the regular development of *ī* to *ē* before *r* (§ 75. 1), this gave **vīderiēm*, etc., Plural *vīderīmus*. But the *iē* of the Singular was early changed to *i* after the analogy of the Plural, giving **vīderim*, *vīderīs*, **vīderīt*. The long vowel was regularly shortened in the 1st and 3d Singular and in the 3d Plural, but was retained in the 1st and 2d Plural, and is common in the 2d Singular. Hence the correct inflection is: *vīderīmus*, *vīderītis*, and probably also *vīderīs*. The forms in *-īmus*, *-ītis*, *-īs*, where they occur, are to be explained as the result of confusion with the Future Perfect (§ 216). A trace of the long vowel in the 3d Singular is found in Plautus, *Mercator*, 924, *addūxerīt*.

Another Aorist formation was by means of the suffix *-s-* in place of *-is-*. This is seen in *dīxim*, *faxim*, *ausim* for earlier **dīc-s-iē-m*, etc.

THE SUBJUNCTIVE.

220. Two formations, both descended from Indo-European, are to be recognized. One of these is characterized by the suffix \bar{a} and belongs to the Present tense; the other is characterized by the suffix \bar{e} , and appears not only in the Present, but in the other tenses as well. Both these suffixes take the place of the thematic vowel of the corresponding Indicative formations.

221. \bar{A} -Subjunctives. — Examples are *moneam* (for **mone-jām*) *reg-a-m*, *audiam*, earlier **regām*, **audiām*; § 88. 2. In the 3d Singular, and 3d Plural also, the \bar{a} has become regularly shortened, but traces of the original quantity are preserved in early Latin, e.g. Plautus, *Pænulus*, 489, *faciāt*.

222. \bar{E} -Subjunctives.

1. *Amem* (for **amā-jē-m*) evidently has preferred this type, to avoid the identity of Indicative and Subjunctive, which would have resulted from the \bar{a} -formation here; **ama-jā-m*, etc., would have given **amām*, **amās*, **amāt*. For the shortening of \bar{e} in **amēm*, see § 88. 2. For the \bar{e} in *amet*, *ament*, cf. § 221. Traces of the original quantity are preserved in Plautus, *Curculiō*, 208, *amēt*.

2. The so-called Future Indicative of the Third and Fourth Conjugations is (outside the First Singular, which is an \bar{a} -Subjunctive) a Present Subjunctive of the \bar{e} -formation which has come to rank as an Indicative, e.g. *fer-ē-s*, *audi-ē-s*, etc.

3. The Imperfect Subjunctive also belongs here. There are two formations, both -s- Aorists in origin :

a) Without connecting vowel. Examples are : *es-s-em*, *ferrem*, for **fer-s-ēm* (§ 106. 3), *vellem* for **vel-s-ēm* (§ 106. 3); *amā-r-em* for **amā-s-ēm* (§ 98. 1); *monē-r-em* for **monē-s-ēm*, *audī-r-em* for **audī-s-ēm*.

b) With connecting vowel, e.g. *reg-e-rem* for *reg-e-s-ēm* (§ 98. 1).

4. The Pluperfect Subjunctive may be the result of proportional analogy: *vīdissem* : *vīdisse* : : *essem* : *esse*.

THE IMPERATIVE.

A. Active.

223. Present, Second Singular.—The most probable view is that which regards this form as consisting of the simple stem. The Imperative, then, will be analogous to the Vocative, to which it bears in general meaning a strong resemblance. Examples are: *ī*, *es*, *leg-e*, *cūrā* (for **cūrā-je*), *monē* (for **mone-je*), *audī* (for **audī-je*). Verbs in *iō* of the Third Conjugation follow the root class (§ 203. 1) *e.g. cape*. *Dic*, *dūc*, *fac*, *fer* are probably for *dīce*, *dūce*, *face*, *ferē* by dropping off the final short *e*.

224. Present, Second Plural.—This is formed by adding *-te* (Indo-European ending of the secondary tenses) to the stem, *e.g. ī-te*, *fer-te*, *es-te*, *legite* (for **lege-te*; § 73. 2), *amāte*, *monēte*, *audite*.

225. Future, Second and Third Singular.—The termination is *-tō*, earlier *-tōd*, appended to the Present Stem, *e.g. ītō*, *fertō*, *estō*, *legitō*, *etc.* Originally this formation had Plural as well as Singular force. Strictly, too, it was a Present, not a Future; the Future force is a special development of the Latin. The ending *-tōd* is preserved in early Latin, *e.g. licētōd*, *datōd*, *violātōd*.

226. Future, Second and Third Plural.—The termination of the Second Plural *-tōte* is simply a pluralization of the Singular *-tō*. The Third Plural termination *-ntō* is a new formation (*cf.* § 225) after the analogy of the relation existing between the Third Singular and Third Plural of the Present Indicative, *i.e.*

<i>suntō</i>	:	<i>estō</i>	:	<i>sunt</i>	:	<i>est</i>
<i>reguntō</i>	:	<i>regitō</i>	:	<i>regunt</i>	:	<i>regit</i>
<i>amantō</i>	:	<i>amātō</i>	:	<i>amant</i>	:	<i>*amāt</i>

B. Passive.

227. The Present.—The Second Singular ending *-re* represents an original *-so*, so that Latin *seque-re* (for **seque-so*; § 76. 6) corresponds exactly to Greek *ἐπε(σ)ο*, *ἐπov*. The Second Plural in *-minī* is probably an old Infinitive which has taken on the function of the Imperative. Cf. the Homeric use of the Infinitive as an Imperative. According to this view Latin *legi-minī* = Greek *λεγέμεναι*, both forms being originally the Dative of a verbal noun with the suffix *-men*. Cf. *ger-men*, Dat. *ger-minī*.

228. The Future forms are the result of appending the Passive *-r* (§ 235) to the corresponding Active forms.

THE PERSONAL ENDINGS.¹*A. Active.*

229. 1st Singular.—In the Indo-European parent-speech *-ō* was the termination of the primary tenses of the Thematic Conjugation, while *-mi* was the termination of the Unthematic Conjugation. Secondary tenses had *-m* only. Latin shows no traces of *-mi* (on *sum*, see § 202. 3); *-ō* appears in the Present, Future, and Future Perfect Indicative. Elsewhere in the Indicative and everywhere in the Subjunctive (including some original Optatives) *-m* appears, e.g. *amābam*, *amāveram*, *sim*, *essem*, etc.

230. 2d Singular.—The Indo-European endings were *-si* (primary) and *-s* (secondary). Latin *-s* may represent the secondary ending, or original **-si* may have lost its final short vowel, so that *legis*, for example, may be either for **leg-e-s* or **leg-e-si*.

¹ The endings of the Perfect Indicative and of the Imperative have already been considered in §§ 211 ff., 223 ff.

231. 3d Singular. — The Indo-European endings were *-ti* (primary) and *-t* (secondary). Apparently in the earliest Latin, *-t* had become *-d*. Cf. early inscriptional forms, *e.g.* FHEFHAKED, FECED, FECID, SIED; *-ti*, on the other hand, became *-t* and very early supplanted the *-d* of the secondary tenses. The closely related Oscan dialect exhibits this distinction of *-d* and *-t* assumed for early Latin.

232. 1st Plural. — The only ending appearing in Latin is *-mus*, earlier **-mōs*, which seems to stand in Ablaut relation (§ 62) to Greek *-μες* (dialectal).

233. 2d Plural. — The Latin ending *-tis* probably stands for *-te* (the Indo-European ending of the secondary tenses) + *s* borrowed either from the 2d Singular or the 1st Plural.

234. 3d Plural. — The Indo-European endings were *-nti* (primary) and *-nt* (secondary). In the Italic languages *-nti* became *-nt*, while *-nt* became *-ns*. Oscan and Umbrian preserve this distinction, but in Latin **-ns* has disappeared, being everywhere supplanted by *-nt* (for *-nti*).

B. Passive.

235. The distinguishing characteristic of the Latin Passive is the presence of final *r*. This formation, in its wide application, is found only in the Italic and Celtic groups of the Indo-European family. Its origin is not yet sufficiently clear to warrant an attempted explanation here. Some have connected it with the Sanskrit ending *-re* of the Perfect Middle. One thing is perfectly certain: Latin *r* does not arise from the reflexive *sē* as was formerly held. In general the Latin Passive is an outgrowth of an earlier Middle. With the exception of the 1st Singular and 1st Plural, Middle forms are seen to have been at the basis of the developed inflection.

236. 1st Singular. — Where the Active form ends in *-ō*, the Passive is *-or*, e.g. *regor* (earlier *-ōr*; § 88. 2), *amābor*. Where the Active ends in *-m*, the Passive has *r* instead of *-m*, e.g. *amer*, *amābar*. The originally long vowel before *-r* sometimes appears in Plautus, e.g. *Asinaria*, 62, *fateōr*; *Amphitruo*, 559, *loquār*.

237. 2d Singular. — This is in origin a Middle, formed with the Indo-European ending **-so*, the termination of secondary tenses in the Middle. Thus *seque* is for **seque-so* (§ 98. 1). Cf. Greek *ἔπει(σ)ο*, *ἔπov*. The ending *-ris* arises secondarily from *-re* by further appending *-s*, the ending of the 2d Singular Active. Thus *sequeris* for **sequerē-s* (§ 73. 2). This was possibly the result of an effort to distinguish the Indicative 2d Singular from the Imperative.

238. 3d Singular. — The origin of the 3d Singular in *-tur* is too obscure to be considered here.

239. 1st Plural. — In place of *-s* of the Active ending *-mus* we have the Passive *-r*, e.g. *regimu-r*.

240. 2d Plural. — We probably have here a periphrastic formation; *legiminī*, etc., presumably stand for *legiminī estis*, in which *legiminī* is a Middle Participle of the same type as Greek *λεγόμενοι*. This formation must have originated in the Present Indicative; *legēbāminī*, *legēminī*, *legāminī*, *legerēminī* are all secondary, formed after the analogy of *legiminī*.

241. 3d Plural. — The origin of the 3d Plural in *-ntur* is too obscure to be considered here.

THE INFINITIVE.

242. In Latin, as in other Indo-European languages, the Infinitives are oblique cases of verbal nouns which have become stereo-

typed by usage. The Dative and Locative cases have contributed most largely to this category.

A. Active.

243. Present. — This was apparently in origin the Locative of a noun with an *-es-*, *-os-* suffix. Thus *reg-er-e* for a primitive **reg-es-i* (§ 141), as though from a Nom. **reg-os*. Unthematic verbs appended *-se* (for *-si*), e.g. *es-se*, *fer-re*, for **fer-se*; *vel-le* for **vel-se*.

244. Perfect. — The Locative *-se* (for *si*) is appended to the *-is-* Aorist stem (§§ 213, 215), e.g. *vīd-is-se*.

245. Future. — In such forms as *dictūrum esse*, it is probable that originally *dictūrum* was not a Participle, but an Infinitive. The form has been plausibly explained as being contracted from *dictū *erom*, where *dictū* is Supine, and **erom* (for **es-om*; § 98. 1) the old Infinitive of the root *es-* (*-esse*). This Infinitive is preserved in Oscan and Umbrian, though lost in Latin. The original force of *dictū *erom* would be 'to be for saying,' i.e. 'to be about to say' (on *dictū* see § 252. 2). The foregoing explanation accords excellently with the use of *dictūrum* and similar forms without *esse* and (in early Latin) with a Plural subject, e.g. *crēdō inimicōs meōs hōc dictūrum*, 'I believe my enemies are for saying this,' i.e. 'will say this' (C. Gracchus, cited by Gellius, i. 7). After the analogy of periphrastic forms, *dictūrum esse* subsequently came into vogue (though the form with *esse* never came to be predominant) and thus gave rise to the Future Active Participle in *-ūrus*, *-a*, *-um*.

B. Passive.

246. Present. — Such forms as *reg-ī*, *dīc-ī* are Dative forms; § 139. Other verbs append the Dative ending to *-es-*stems, e.g. *cūrārī*, *monērī*, *audīrī*, for **cūrā-es-ī*, etc.; so *ferrī* for **fer-s-ī*.

Cf. § 243. No Passive signification originally attached itself to these Dative Infinitives ; at the outset they could not have differed essentially from the Locative Infinitives of the Active. The differentiation into Active and Passive meanings was purely arbitrary.

The Passive Infinitive in *-ier* (archaic and poetical) is of uncertain origin. Some think that *-er* represents the apocopated Active ending *-ere*. This seems to have been fairly frequent in colloquial Latin, *e.g.* *biber* for *bibere* ; *tanger* for *tangere*. *Agier*, therefore, and similar forms might represent Passive Infinitives with an added Active termination.

247. Perfect and Future. — Periphrastic forms are used here, *e.g.* *dictus esse, dictum iri*. The latter consists of the Supine combined with the Passive of *eō* in its impersonal use.

THE PARTICIPLES.

248. Present Active. — The suffix here is *-nt-*, *e.g.* *-sēns* for **-s-nt-s* (§ 102. 1) in *ab-sēns, prae-sēns* ; *regēns* for **rege-nt-s*. The oblique cases of *iēns* are formed from the stem **ej-o-*, *e.g.* *euntis* for **ej-o-ntis*.

249. Future Active. — See § 245.

250. Perfect Passive. — The suffix was *-tus*, earlier *-tos*, appended originally to the weak form of the root, *e.g.* *dic-tus, dūc-tus, tentus* for **tṇ-tos* (§ 102. 1). Where the root ended in *d* or *t*, *ss* or *s* arose phonetically (§ 108. 1), *e.g.* *sessus* for **sed-tos* ; *ūsus* for **ūt-tos*. By an extension this spurious ending, *-sus* became appended also to some guttural and liquid stems, *e.g.* *lāp-sus, fixus, pulsus*.

251. The Gerundive. — The origin of the termination *-endus, -undus* is not yet determined.

GERUND AND SUPINE.

252. 1. The Gerund. — The Gerund is probably a development of the Gerundive. Such expressions as *virtūs colenda est* might easily give rise to a *colendum est* (impersonal), while similarly *patriae dēfendendae causā* might generate a *dēfendendī causā*.

2. The Supine. — The Supine in *-um* is an Accusative of a Verbal noun formed with the suffix *-tu-*; the Supine in *-ū* is a Locative formation from the same stem (*cf.* § 163).

CHAPTER VIII.

ADVERBS AND PREPOSITIONS.

ADVERBS. ¹

253. Adverbs are, in the main, case-forms which have become stereotyped as the result of highly specialized usage. The cases most frequently thus employed are the Accusative, Ablative, Locative, and Instrumental.

254. Accusatives. — These result from various syntactical usages. Thus :

1. Accusative of Result Produced (*Gr.* § 176. 2 ; 3) , *e.g.* *multum, plerumque, plurimum, aliquid, facile, fortius*, and other comparatives, *etc.*
2. Appositives, *e.g.* *vicem, partim, etc.*; § 310.
3. Limit of motion, *e.g.* *forās*.

255. Ablatives. — Here belong :

1. Adverbs in *-ē* (for *-ēd*; § 130) from *ō*-stems, *e.g.* *pulchrē, sanē; certissimē*. *Benē* and *malē* result from the operation of the 'Breves Breviantes' law (§ 88. 3).
2. Adverbs in *-ō* (-for *-ōd*; § 130) from *ō*-stems, *e.g.* *certō, continuō*. *Cf.* early Latin *meritōd*. *Citō* and *modō* result from the operation of the 'Breves Breviantes' law (§ 88. 3).
3. Adverbs in *-ā* (for *-ād*; § 118) from *ā*-stems, *e.g.* *extrā, suprā, infrā, contrā, suprà, ultrā, citrā, juxtā*. *Cf.* early Latin *exstrād, suprad*. Many words, clearly Ablative in form, appar-

¹ See especially Lindsay, *Latin Language*, chap. ix.

ently became Adverbs through the medium of Instrumental constructions, *e.g.* *ūnā, rēctā, quā, eā, eādem* (*sc. viā*), *etc.* Cf. § 341. 5.

256. Locatives. — Here belong :

1. True Locatives, *e.g.* *herī, vesperī, humī, bellī, militiae, domī, postrīdiē* (§§ 126 ; 173), *merīdiē* ; *dīē crāstinī* ; *noctū* ; *temere* (originally, 'in the dark,' and so 'blindly,' 'rashly') ; also the Pronominal Adverbs *hī-c, illī-c, istī-c* (§ 197).

2. Ablative in Locative function, *e.g.* *forīs*.

257. Instrumentals. — Here belong : *sponte, forte, repente, numerō*, 'promptly' (originally a musical term, — 'with the music,' 'with the beat'), *saepe* (originally, 'with frequency').

258. Even a few Nominatives have become Adverbs, *e.g.* *adversus* ; *rūrsus* for *reversus* ; *prōrsus* for *prōversus*.

259. Many adverbs were originally phrases, *e.g.* *dēnuō* for *aē novō* (§ 103. 4) ; *īlicō* for *in *stlocō* (§ 89) ; *admodum*. Some have thought that Adverbs in *-iter* also belong here, *e.g.* *breviter* for *breve iter*, *etc.* Cf. German *kurzweg*.

PREPOSITIONS.¹

260. Prepositions are in the main Adverbs which have come to have special uses in connection with certain cases. Historically they belong to a relatively late period in the development of language. Originally the cases alone sufficed for denoting relations, but as greater precision became necessary, the requisite definiteness of meaning came to be expressed by various Adverbs, which ultimately crystallized as Prepositions ; yet an independent adverbial usage often remained.

¹ See especially Lindsay, *Latin Language*, chap. ix.

In the earlier period of their employment, Prepositions enjoyed considerably more latitude of usage than later, being freely combined with almost any oblique case ; ultimately, however, most of them became restricted to combination with particular cases. This is truer of Latin, for example, than of Greek, where the older freedom is quite apparent. The Oscan and Umbrian also show greater latitude than Latin.

261. \bar{A} , *ab*, *abs*, *au*-.

1. \bar{A} , *ab*, *abs* go back to an Indo-European **apo*, Greek ἀπό. By loss of the final *o*, this became in Latin *ap*-, seen probably in *aperiō*. But in composition and in phrases before voiced consonants *p* became *b*, e.g. *abdō* for **ap-dō*; *ab genere* for **ap genere*, and ultimately the form with *b* supplanted that with *p*. *Abs* is formed from *ab* by appending -*s*, probably the Genitive ending in its weak form (§ 138), an element frequently employed in amplifying prepositional and adverbial formations. Cf. *ex* (= *ec-s*) from *ic*-; *sub-s* (in *suscipiō* for **sub-s-cipiō*; § 105. 1) from *sub*; *obs* from *ob*; also Greek ἐξ by the side of ἐκ; ἐνς, whence Attic εἰς, by the side of ἐν; ἀμφίς by the side of ἀμφί. \bar{A} seems to have developed from *abs* in compounds, e.g. *āvellō* from **asveliō* (for **abs-vellō*; § 105. 2), and then to have detached itself as a 'by-form' of *ab*, *abs*.

2. *Au*-, Sanskrit *ava*, goes back to an Indo-European *ave*. It appears in Latin only in *aufugiō*, and *auferō* for **ave-fugiō*, **ave-ferō* by Syncope (§ 92). Cf. *auspex* for **av(i)spex*; *augurium*, etc.

3. A form of **apo* with aphæresis of the initial vowel is *po*-, seen in *pōnō* for **po-s(i)nō* (§§ 92; 89); cf. *po-situs*. *Po*- also possibly appears in *po-liō* (root *li*-; cf. *li-nō*), 'rub off, polish.'

4. A form *af*, found in early inscriptions and occasionally later, is of uncertain origin. It is probably merely a dialectal variation of *ab*.

262. *Ad* is cognate with English *at*. In early Latin inscriptions we find a form *ar-*, used before *f* and *v* in composition, e.g. *arfuērunt*, *arversus*; also *ar-biter*, *arcessō* in classical Latin. *Ar-* is probably of dialectal origin.

263. *Ambi-*, Greek ἀμφί, is probably an old Locative.

264. *Ante* for **anti*, Greek ἀντί, is probably an old Locative.

265. *Apud* seems to be Indo-European **apo* (§ 261. 2) with an appended *d*.

266. *Circum*, *circā*, *circiter* are all connected with the noun *circus*, 'ring, circle, circus'; *circum* is the Accusative Singular, used first as Adverb, later as Preposition; *circā* is probably a late formation after the analogy of *extrā*, *suprā* (§ 255. 3). *Circiter* probably contains the Comparative suffix *-ter* (§ 181). Cf. *inter*, *propter*, *subter*.

267. *Cis*, *citrā* are from the root *cĭ-*, 'this.' On the final *-s* of *cis*, see § 261. 2. *Citrā* has the comparative suffix (§ 181). On the formation, see § 255. 3.

268. *Clam* evidently contains the root of *cēlō*, 'conceal.' The formation is uncertain.

269. *Com-* (*cum*). — See § 58. *b*). The relation of *co-* to *com-* is not clear.

270. *Contrā*. — See § 255. 3.

271. *Dē* is obscure in its formation and its relationship.

272. *Ergā*, *ergō* are obscure in etymology and formation. They can have no connection with Greek (ε)ργον, *work*.

273. *Ex*, *ec-*, *ef-*, *ē*. See § 105. 2. On the final *s* of *ex* (= *ec-s*), see § 261. 2.

274. *Extrā* is formed from *ex* by means of the Comparative suffix *tero-* (§ 181). On the case-formation, see § 225. 3.

275. *In* is the unaccented form of Indo-European **en*, Greek *ἐν*. The original form of the Preposition is seen in early Latin *en-do*. Cf. Greek *ἐνδο-θι*, *ἐν-δον*. Another form of *endo* is *indu-* (*indi-*) seen in *indi-genus*, *ind-olēs*, and in several early Latin words, e.g. *indu-gredi*.

276. *Īnfrā*. Cf. *īnferus*, and see § 255. 3.

277. *Inter*, *intrā* are formed from *in* by means of the Comparative suffix *tero-*; §§ 181; 255. 3.

278. *Intus* contains the same suffix as seen in *divīnitus*, *funditus*, etc.

279. *Jūxtā* is from the stem *jūxtā-*, a Superlative of *jūgis*, 'connected,' 'continuous.' For the case-form, see § 255. 3.

280. *Ob* is from an Indo-European **op-i-*, a Locative formation kindred with Greek *ἐπι-*, to which it stands in Ablaut relation (§ 62). The form *ob* has developed from **op*, exactly as *ab* from **ap* (§ 261. 2); yet *op-* probably appears in *op-eriō*, and is preserved in Oscan.

281. *Per* is for an Indo-European **peri* (Locative). Cf. Greek *περί*.

282. *Post*, early Latin *poste*, apparently goes back to a Locative **posti*.

283. Prae, praeter. — *Prae* is very likely a Dative from *prā-*, an extension of *pr-* (weak form of *per-*). Cf. *prō(d)* from *prō-*. *Praeter* bears the same relation to *prae* as *inter* to *in*; *subter* to *sub*.

284. Prō, prō-, por-. — *Prō* and *prō* were Indo-European 'by-forms.' In Latin, *prō-* appears only in composition, chiefly before *f* (e.g. *profugiō*, *profiteor*, *proficiscor*), but also elsewhere e.g. *protegō*, *pronepōs*). The *d* of *prōd-*, seen in *prōdesse*, *prōdīre*, etc., is not original, but is probably borrowed from *retro(d)* or *red-*. *Por-*, e.g. in *por-tendō*, *porrigō*, *polliceor* (for **por-liceor*) may represent *pr-*, weak form of the root *per-* (§ 100. 2), with which all the above words are ultimately connected.

285. Prope, propter. — *Prope* is for *pro* + *pe*. Cf. *quip-pe*. *Propter* bears the same relation to *prope* as *inter* to *in*, etc.

286. Re-, red-. — *Re-* is the earlier form; the *d* of *red-* is of uncertain origin.

287. Secundum is an Accusative from *secundus*, lit. 'following' (*sequor*).

288. Se-, early Latin *sēd-*, preserved in *sēditō*, may have been an Ablative formation; *sō-*, seen in *sō-cors*, *sō-brius*, may represent the Ablaut of *sē-*.

289. Sub, subter. — The Indo-European form is **upo*. Cf. Greek *ὑπό* (with irregular rough breathing). The initial *s* is explained as containing a reduced form of *ex*, viz. 'ks, so that **(k)sup* would represent the primitive formation. For the change of *p* to *b*, see § 261. 2. On *subter*, cf. *inter*.

290. Super, suprā. — *Super* goes back to an Indo-European **uper*. Cf. Greek ὑπέρ (with irregular rough breathing). For the initial *s*, see § 289. *Suprā* sustains the same relation to *super* as *intrā* to *inter*.

291. Tenus is probably the Accusative of an obsolete *tenus*, -*eris*, lit. 'a stretch,' root *ten-*.

292. Trāns is probably the Present Participle of **trāre* seen in *intrāre*, *penetrāre*; i.e. originally *trāns flūmen mīlitēs dūxit* meant *he led his troops, crossing the river*. On *trā-*, see § 105. 2.

293. Uls, ultrā from root *ol-*, 'that' (cf. *olle*; § 195), are the pendants to *cis*, *citrā*.

294. Versus, versum, etc. — See § 258.

CHAPTER IX.

SYNTAX.¹

THE CASES.

Names of the Cases.

295. The English word *case* comes from the Latin *cāsus*, which was a translation of the Greek word *πτῶσις*. *πτῶσις* (from *πίπτω*, *fall*), as a grammatical term, primarily denoted a 'change' or 'deviation,' and was accordingly first employed to denote the oblique cases, as being 'deviations' (*πτώσεις*) from the Nominative. The Nominative itself, therefore, was not at the outset a *πτῶσις*, though it early came to bear this name.

296. The Greek names of the cases were :

ὀνομαστική (*sc.* *πτῶσις*), Nominative.

γενική, Genitive.

δοτική, Dative.

αἰτιατική, Accusative.

κλητική, Vocative.

¹ See especially Brugmann und Delbrück, *Grundriss der Vergleichenden Grammatik*, vols. iii-v (*Vergleichende Syntax*, by Delbrück), Strassburg, 1893-1900. Landgraf, *Historische Lateinische Grammatik*. Riemann et Goelzer, *Grammaire Comparée du Grec et du Latin*, vol. ii. Paris, 1899. Dräger, *Historische Syntax der Lateinischen Sprache*, 2 vols. 2d edition. Leipzig, 1878, 1881. Kühner, *Ausführliche Grammatik der Lateinischen Sprache*, vol. ii. Hannover, 1878. Schmalz, in Müller's *Handbuch der Klassischen Altertumswissenschaft*, vol. ii. 3d edition. Munich, 1900. Riemann, *La Syntaxe Latine*. 4th edition. Paris, 1900. Roby, *Latin Grammar*, vol. ii. 5th edition. London, 1888.

The Nominative was so called because it was the case employed for naming a substantive when it was simply cited as a word.

The significance of the term γενική is in dispute. Some have thought it meant 'the case of source or origin.' But the usual meaning of γενικός is against this view. It probably meant 'the case of the genus,' or 'the generic case.' This view accords with the regular use of the Genitive to restrict the meaning of another word by denoting the class or γένος to which it applies, *e.g. love of parents, 'fishers of men,' tons of earth.*

The Dative was called δοτική, 'the case of giving,' though this is simply one prominent function of the case.

In calling the Accusative αἰτιατική, the Greeks intended to designate this case as the 'case of effect,' *i.e.* of the thing *caused* (αἰτία). Here again the name designated but imperfectly the functions of the case. For the Accusative indicates also the person or thing affected, to say nothing of other uses.

Κλητική means 'calling case' or 'case of address.'

297. The Romans in devising grammatical terms for their own language simply translated these Greek names. Ὀνομαστική became *Nōminātīvus* (*sc. cāsus*). In translating γενική by *Genetīvus* the Roman grammarians falsely interpreted the case as that of *source*, or *origin*, misled doubtless by the frequent use of the Greek Genitive in that function. Δοτική became *Datīvus*. Αἰτιατική was falsely rendered *Accūsātīvus*, as though αἰτιατική were derived from αἰτιάομαι, *accuse*. Κλητική became *Vocātīvus*. The Greek had no Ablative, and for this case the Romans were therefore obliged to coin a new term; they named it *Ablātīvus*, 'the case of taking away.' This designation was fairly accurate for certain uses of the case, *viz.* those of the true Ablative; but it ignored the Instrumental and Locative uses of the case (§ 331). It is uncertain just when and by whom these Latin names were introduced. They had become established as current terms by Quintilian's time (90 A.D.).

Review of Case-Theories.

298. Since the beginning of the last century, there has been much discussion concerning the original force of the cases both individually and collectively.

299. The Localistic Theory.—The chief representative of this was Hartung, who set forth his views in 1831 in a work entitled *Ueber die Casus, ihre Bildung und Bedeutung*. Hartung started with the assumption (largely a correct one, according to the views of most investigators) that in language the development is from the concrete to the abstract, — that words at the outset indicated definite sense concepts, which later came to be used in transferred meanings. Applying this principle to the cases, he assumed that in Greek and Latin there had been (in addition to the Nominative and Vocative) three cases, one to designate each of the three definite local relations, *from*, *in*, and *to*. Applying this principle first to Greek, he explained the Genitive as the *from*-case, the Dative as the *in*-case, the Accusative as the *to*-case. For Latin, substantially the same explanation was given, except that the Dative of the Greek has in Latin, according to Hartung, been differentiated into two cases, Dative and Ablative, of which the latter has entirely absorbed the *in*-function, while the Dative has developed new meanings.

Hartung's theory has been styled 'through-going' Localism. It asserted that the original Indo-European case-system (apart from Nominative and Vocative) had originally been limited to three cases, which expressed the three natural space relations: *to*, *from*, *in*. Wherever in the individual languages more cases appeared (as in Latin or Sanskrit), these were held to be differentiations ('*Zersplitterungen*') of the original three. Whatever may be true of the meaning of individual cases, comparative grammar conclusively proves that Localism in the form in which Hartung held it

is absolutely untenable. A case-system of at least six clearly distinguished oblique cases must have existed in the Indo-European parent-speech.

300. The Logical Theory. — Michelsen, in his *Casuslehre der lateinischen Sprache vom causal-locales Standpunkte aus*, published in 1843, endeavored to apply logical categories to the explanation of the cases. According to him two principles are fundamental: 1) Causality (including cause and effect); 2) Finality. Hence in every sentence, he holds, we must have a cause, an effect, and a purpose. The Nominative he regarded as the case expressing the cause, the Accusative the case of the effect, the Dative as the case of finality or purpose. The Genitive and Ablative were also given special treatment, though these cases were regarded as not essential to logical completeness. But Michelsen's theory is false in principle. Language is not founded on logic, and any attempt to explain forms of speech as primarily identical with logical categories will probably always be fruitless.

301. The Grammatical Theory. — In 1845 appeared Rumpel's *Casuslehre in besonderer Beziehung auf die griechische Sprache*. This book was a protest against the Localism of Hartung on the one hand and the logical theory of Michelsen on the other. Rumpel asserted the *purely grammatical* character of the cases. The Nominative he defined as the case of the Subject, the Accusative as the case used to complete the meaning of the verb, the Genitive as the adnominal case or case used to complete the meaning of a noun, while the Dative was used to modify the meaning of the sentence as a whole. Where the Genitive limited a verb, it was explained as denoting an internal relation as opposed to an external relation, such as that denoted by the Accusative. As Rumpel concerned himself only with Greek, he propounded no theory of the Ablative.

302. Subsequent Views. — Rumpel's theory shows much better method than either Hartung's or Michelsen's. Yet the grammatical theory of the cases is not universally true. Discussion since Rumpel's day has shown that while some of the cases are undoubtedly grammatical in their origin, others were just as certainly local. To the Grammatical cases belong with certainty the Nominative and the Genitive, the former as the case of the subject, the latter as the adnominal case. To the local cases belong with certainty the Ablative, as the *from*-case, the Locative, as the *in*-case, and the Instrumental, as the case denoting *association with*. Diversity of opinion still exists as to the Dative and to some slight extent as regards the Accusative. If we regard the Dative as originally the case of *direction*, it is a local case; if we take it as originally used to modify the sentence as a whole, it is a grammatical case. The Accusative is usually regarded as simply completing the meaning of the verb, and is therefore classified as a grammatical case; but there is some warrant for considering it as originally denoting the *goal of motion*, in which case it would be local. See § 311.

THE ACCUSATIVE.¹

303. The distinction between the Accusative of the Person or Thing Affected (*Gr.* § 175) on the one hand and the Accusative of the Result Produced (*Gr.* § 176) on the other, is one of fundamental importance. Other designations are often employed to distinguish the two types. Thus the Accusative of the Person or Thing Affected is called External Object, the Accusative of Result Produced the Internal Object. But these designations are likely to prove too philosophical for elementary pupils. German scholars employ also the designations '*Akkusativ des Affekts*' and '*Akkusativ des Effekts*,' terms which might be advantageously imitated in English, if our language only had the noun *Affect*. When the

¹ For the original force of the Accusative, see § 311.

Greek philosophers gave the name αἰτιατική to the Accusative, they had in mind only the second of the two uses of the Accusative now under consideration, viz. the Accusative of the Result Produced or, as they designated it, of the Thing Caused ('Internal Object,' 'Effect'). The Romans, in transferring the Greek name of the case to Latin, should have rendered it by some such word as *Causātivus* (a designation actually employed by Priscian) or *Effectivus*. Either of these would, like the Greek original, have been a defective name (cf. § 296), but it would have been accurate as far as it went.

304. The Accusative with Passives used as Middles.—The treatment of the Accusative after Passive Verbs in *Gr.* § 175. 2. *a*) is based on the elaborate discussions of Schröder, *Der Accusativ nach Passiven Verben in der Lateinischen Dichtersprache*, Grossglogau, 1870; Engelhardt, *Passive Verba mit dem Accusativ*, Bromberg, 1879; and the treatment of Kühner in his *Ausführliche Lateinische Grammatik*, ii. § 71. *b*). The explanation of the Accusative as Synecdochical (cf. *Gr.* § 180), which is sometimes given for this construction, is not adequate. It might explain such phrases as *cinctus tempora hederā*, but is irrational for *galeam induitur*, *nōdō sinūs collecta*, *laevō suspēnsī loculōs lacertō*, and many others. On the other hand, the interpretation of the Passive in such instances as a Middle, and the Accusative as the Direct Object, furnishes a satisfactory explanation of all phrases of this type.

Sometimes by an extension of usage the Middle is employed to indicate that the subject lets some action be consummated upon himself, or has it done. Cf. English *he had his hair cut*. An illustration of this is Virgil, *Aen.* ii. 273, *per pedēs trājectus lōra*, 'having had thongs drawn through his feet.' For a few instances in which a Synecdochical Accusative occurs with Passive verbs, see § 307.

305. Accusative of Result Produced.—The different constructions grouped together under *Gr.* § 176. 1–5, are often referred to the Cognate Accusative as the original from which they have all developed. The Cognate Accusative, however, is so restricted in its scope that it seems better to regard it as a subdivision of a larger category rather than as the basis of such a category. *Cf.* Brugmann, *Griechische Grammatik*³, § 439. 2, who classifies *τύπτειν ἔλκος* (*strike a wound, i.e. produce a wound by striking*) and *νικᾶν νίκην*, *win a victory*, as parallel subdivisions of the general category of the Accusative with Verbs of *producing*.

306. Accusative of Person Affected and of Result Produced Dependent upon the Same Verb (*Gr.* § 178).—The true character of this construction is best seen in phrases where the Accusative of Result is a Neuter Pronoun or Adjective, *e.g.* *tē haec rogō, id mē docēs*, the essential point being that the Latin was able not only to say *id docēs* (Acc. of Result) and *mē docēs* (Acc. of Person Affected), but to combine the two constructions in a single phrase. It is a misconception to regard the Accusative of Result in such sentences as any less the Direct Object than the Accusative of the Person Affected. Each of the two Accusatives is a Direct Object equally with the other. There is no essential difference between the construction of *haec* in *haec mē rogās* and the construction of *haec* in *haec rogās*. In many instances the Accusative of Result with verbs of *asking, teaching, etc.*, is clearly of secondary origin, *e.g.* *tē sententiam rogō*, after *tē hōc rogō*; *tē cēlāvī sermōnem* after *tē id cēlāvī*.

307. The Synecdochical or Greek Accusative (*Gr.* § 180).—There can be little doubt that this construction is a Grecism. *Cf.* Quintilian, ix. 3. 17. Some have claimed it as a genuine Latin idiom, but its almost total restriction to the poets of the imperial age and to the prose writers who imitate them is against any such

theory. The names 'Accusative of Specification' and 'Accusative of Respect' are sometimes used to designate this construction.

With Passive verbs it is better in most cases not to recognize a Synecdochical Accusative. Apparent cases of the construction can usually be classed under *Gr.* § 175. 2. *d*), but in some twenty instances in the Augustan poets and in about twice that number in Lucan, Silius, Statius, and Valerius Flaccus, we must recognize the Synecdochical Accusative with Passive verbs.

308. Accusative in Exclamations.—This construction is apparently the result of ellipsis. Just what verb is to be supplied in thought in particular instances, is not always clear, nor is it material that it should be determined.

309. The Accusative as Subject of the Infinitive.—The Accusative as Subject of the Infinitive is an outgrowth of the use of the Accusative as Direct Object. The history of the construction may be illustrated as follows: In an expression like *jussī eum abire*, *eum* was originally the object of *jussī*, while the Infinitive was a noun in the Locative (§ 243), the force of the entire phrase being: *I ordered him to a going* (§ 351). But in course of time the *eum abire* came to be felt as a whole and as sustaining an object relation to the verb, a conception which led to such expressions as *jussit puerōs necārī*, where *puerōs* could never have been the object of *jussit*. When once the construction of the Accusative with the Infinitive became established, its extension was rapid. Expressions like *jussit puerōs necārī* easily led to *dixī puerōs necātōs esse*, whence *puerī necātī esse dicēbantur* and other types of Infinitive usage.

310. Id genus, muliebre secus, etc.—1. *Id genus* is clearly appositional in origin, as indicated by the fact that it regularly occurs only in combination with a Nominative or Accusative, *i.e.* not *virōrum id genus*, but usually *virī id genus*, *virōs id genus*, *etc.*

2. **Muliebre secus, virile secus**, while doubtless of the same origin as *id genus*, have nevertheless advanced a stage beyond it in actual use. We find not only *liberī muliebre secus*, 'children of the female sex,' lit. 'children, the female sex' (of children), but also *liberōrum (liberīs) muliebre secus*.

3. **Meam vicem, tuam vicem, etc.** — The appositional or predicate origin of this phrase seems to be indicated by such early Latin usages as Plautus, *Mostellaria*, 355, *quī hodiē sēsē excruciarī meam vicem possit pati*, 'who can let himself be tortured, as my substitute;' *Captivi*, 697, *ut eum remittat nostrum ambōrum vicem*, 'to release him in return for us two,' lit. 'as an exchange for us two.'

4. **Magnam partem, maximam partem.** — The appositional origin of these phrases is less certain, yet expressions like Livy, v. 14 and ix. 37. 9, *maximam partem ad arma trepidantēs caedēs oppressit*, seem to point in that direction.

311. Original Force of the Accusative Case. — Rumpel in his *Casuslehre*, published in 1845 (*cf.* § 301), contended that the Accusative served simply as the complement of the verb, and that all the varieties of meaning, such as limit of motion, duration of time, direct object, *etc.*, are but varieties of this primary function. Rumpel accordingly regarded the Accusative as a grammatical case, and this view has been maintained by most subsequent scholars. It is advocated to-day by all the leading authorities, *e.g.* Delbrück, Brugmann, Hübschmann, Holzweissig, Gädicke, and others. This theory, it must be admitted, is both simple and rational. Yet there have always been some scholars who have recognized the *goal*-notion as representing the original force of the Accusative. While it is impossible to prove the truth of this latter theory, yet the arguments in its favor deserve consideration. They are the following:

1. The antecedent probability of the existence of a case denoting *to a place, person, or thing*, is very great. It is admitted that

the parent-speech had an *in*-case (the Locative) and a *from*-case (the Ablative), so that a *to*-case might naturally be expected as the complement of these.

2. There are advantages in starting with a concrete, tangible meaning for the Accusative. Language undeniably develops from the concrete to the abstract.

3. The *goal*-notion is shown by the testimony of those Indo-European languages whose literature reaches furthest back, to have been an extremely primitive force of this case. Thus Sanskrit and Homeric Greek exhibit the *goal*-meaning of the Accusative, while the vestiges of it in Latin indicate that in pre-historic times it had been more frequent. Thus the use of town names and of *domum*, *domōs*, *rūs*, to denote the *goal* of motion, and the occurrence of such expressions as *exsequiās ire*, *īnfitiās ire*, *pessum dare*, *vēnum dare*, point to a freer use of the same kind in early times. The Supine in *-um* also shows this primitive force. It is noteworthy that in post-Homeric Greek this *goal*-use of the Accusative had become obsolete. Post-Homeric Greek stands upon the same ground as Latin in this respect. In both of these languages the practical disappearance of the *goal*-notion in historical times would seem to indicate that as other uses developed the original function gradually passed away.

4. The other uses of the Accusative may all be satisfactorily derived from the *goal*-use as the original one. As the first and most obvious developments must be considered the Accusative of Extent of Space and of Duration of Time. Thus *vīginti milia prōcessit* would originally have meant 'he advanced to the limit of twenty miles,' whence arose secondarily the notion of extent. Similarly *vīginti annōs vīxit* would have meant originally 'he lived to the limit of twenty years,' whence secondarily 'he lived throughout twenty years.' In the case of the Direct Object, the Accusative may also have originally designated the limit of the action of the verb. Thus *aedēs strūxit* would originally have meant 'he per-

formed an act of building, the goal of which was a house.' Similarly *videō hominem*, 'I perform an act of seeing, the goal of which is a man.' Cf. the similar idiom prevalent in certain Romance languages, e.g. Spanish *yo veo al hombre*, lit. 'I see, to the man' = 'I see the man.' The so-called Accusative of Specification, which, so far as it appears in Latin, is apparently a Grecism (§ 307), would be the least obvious development of the goal-notion. Yet expressions like *umerōs similis deō*, lit. 'like a god as to the shoulders,' may be explained as originally meaning 'looking to the shoulders,' 'as regards the shoulders;' i.e. the shoulders are conceived as the *thought limit* to which the statement is referred.

THE DATIVE.

312. The Dative probably originally designated *motion towards*, *motion in the direction of*. It was accordingly a localistic case. Some, however, as Delbrück, regard it as a grammatical case, and think that originally it was a mere sentence modifier, very much like the so-called Dative of Reference. But it is much more difficult to develop the notion of direction from the force of the Dative as a sentence modifier than *vice versa*. It therefore seems simpler to assume this concreter meaning as the original one. In that case the poetical construction of the Dative to denote direction of motion (*Gr.* § 193) would represent the original meaning of the case.

313. Dative of Indirect Object.—The Dative of Indirect Object is a very obvious development of the notion of *direction*, just assumed as the original meaning of the Dative case. Thus *tibi hōc dīcō*, 'I tell you this,' would originally have meant 'I tell this in your direction'; so *tibi ignōscō*, 'I pardon you'; *ruīna nōbīs impendēt*, 'ruin threatens us.'

314. Indirect Object with Verbs signifying 'Favor,' 'Help,' etc.—It is a common conception that the Latin is peculiar in construing many verbs of these meanings with the Dative; but this impression is erroneous, and largely due to the loss of inflections in English, whereby the original distinction between the Anglo-Saxon Dative and Accusative has become obliterated, so that the English 'Objective' is commonly felt as an Accusative.

As a matter of fact many verbs of the category under consideration were intransitive in Anglo-Saxon and in Teutonic generally, and accordingly governed the Dative case. Modern German gives clear illustration of this. Cf. *e.g.* *ich glaube Ihnen, ich verzeihe Ihnen, ich traue Ihnen, ich helfe Ihnen*. Latin, therefore, does not differ from English and the other Teutonic languages in taking the Dative with these verbs; on the other hand there is a striking agreement, when we come to examine the matter from the historical point of view.

315. The Indirect Object with Compound Verbs.—It is a misconception to suppose that the mere fact of composition with certain prepositions was the occasion of the employment of the Dative case. Prepositions when prefixed to *neuter* verbs often essentially modify the previous character of the verb. Sometimes they make the verb transitive (*i.e.* the verb becomes transitive) and it then governs the Accusative (*e.g.* *inīre magistrātum*. Cf. *Gr.* 175. 2. a). More frequently a *neuter* verb, when compounded with a preposition, becomes only so far modified in meaning as to admit an indirect object, not a direct one, *e.g.* *periculis incurrit*. Sometimes also composition changes the character of a transitive verb, making the compound incapable of governing a direct object, though admitting a Dative, *e.g.* *obsequor*. But in all these the use of the Dative should be referred not to the fact of composition, but to the *meaning* of the verb. Least of all should the Dative be regarded as depending upon

the preposition,—an error often propagated in the minds of elementary pupils.

316. The Dative of Reference is an outgrowth of the original notion of *direction* belonging to the Dative. It is a somewhat less obvious development than the Dative of Indirect Object, representing as it does a somewhat weaker relation. Thus in a sentence like *nōbīs hosfēs in cōnspectum vēnerant*, the Dative represents the direction of the thought as a whole rather than of the action indicated by the verb. The name 'Dative of Interest' sometimes applied to this construction is somewhat narrower in scope than 'Dative of Reference,' and hence is less satisfactory. The subdivision of the construction into 'Dative of Advantage' and 'Dative of Disadvantage' is also quite useless. These designations tend to obscure the real character of the construction, calling attention, as they do, to what is merely accidental. A division of the Accusative of Direct Object into 'Accusative of Advantage' and 'Accusative of Disadvantage' would be equally justified.

317. The Ethical Dative.—This is simply a special phase of the Dative of Reference, and is entitled to recognition as a separate category only because it represents the Dative in its most attenuated force,—often, in fact, quite untranslatable. It is confined to the Personal Pronouns.

318. Dative of Agency; Dative of Possession.—These are both developments of the Dative of Reference. Thus *haec mihi agenda sunt* originally meant 'this is to be done and it is with reference to me that this is true,' *i.e.* 'I must do this.' Similarly *nōbīs sunt agrī* originally meant 'there are lands, and it is of us that this is true,' *i.e.* 'we have lands.'

319. Dative of Purpose.—This, like the Dative of Indirect Object, is a perfectly obvious development of the original notion

of direction belonging to the Dative. Thus *receptuī canere*, 'to sound the signal for a retreat,' was originally 'to sound the signal in the direction of a retreat'; *rei pūblīcae clādī sunt* similarly meant 'they are in the direction of damage to the state.'

THE GENITIVE.

320. The Genitive is best regarded as primarily an adnominal case, *i.e.* as originally used with nouns to define their meaning more closely. It is therefore a grammatical, as opposed to a local, case. The use of the Genitive with verbs must be regarded as secondary, and as developed from its use with nouns by some association or analogy.

321. Genitive with Nouns.—The special kind of closer determination expressed by the Genitive, depends upon the context. There was no one type from which the others developed, but all of the varieties enumerated in *Gr.* § 195 (excepting the Genitive of Quality) are equally primitive. Most of these call for no special comment, but the Objective Genitive is noteworthy as exhibiting at times a wider extension of application than at first belonged to it. Theoretically the Objective Genitive is used only with verbal nouns whose corresponding verb governs the Accusative. Thus *amor patris* corresponds to *amāre patrem*, *metus deōrum* to *metuere deōs*, *etc.* But by an extension of usage we frequently find the Genitive used with nouns derived from verbs which govern other cases, and even from verbs which admit no case construction whatever. Typical examples are: *cōsuētūdō hominum*, 'intercourse with men'; *excessus vītae*, 'departure from life'; *īra praedae amissae*, 'anger on account of the loss of the booty'; *argentī ōrātiō*, 'talk about the money.' These relations, however, are usually more accurately expressed by means of prepositions.

322. Genitive of Quality.— This seems to have been of secondary origin and to have developed from the Subjective Genitive. Thus *homō magnae virtūtis* was probably originally ‘Virtue’s man.’ In conformity with this origin, the Genitive of Quality more commonly denotes a *permanent* quality, as opposed to the Ablative of Quality, which was primarily employed to designate qualities which were more or less *transitory*. For a completer statement of the difference between the Genitive of Quality and the Ablative of Quality, see § 345.

323. Genitive with Adjectives.— This construction must be regarded as equally primitive with that of the Genitive with nouns. *Cupidus laudis*, for example, is just as original a construction as *cupiditās laudis*.

As regards the construction with *similis*, many fine-spun theories have been propounded to account for the difference between *similis* with the Genitive and *similis* with the Dative. The difference, however, is probably merely one of chronology and not of meaning. In the earliest Latin we find *similis* construed only with the Genitive. This is probably Plautus’s unvarying usage. Later the use of the Dative begins to creep in, doubtless after the analogy of *pār* and similar words construed with the Dative, and as time goes on the Dative gains the supremacy more and more, until in Silver Latin the Genitive is comparatively rare. See Jones, Thomas M., *Case-Constructions of Similis and its Compounds*, Baltimore, 1903.

324. Genitive with Verbs.— If the Genitive was primarily an adnominal case, its use with verbs must be of secondary origin, and is due either to some analogy whereby the verb adopts the construction of a noun of kindred meaning, or else to the ellipsis of a governing word.

325. Genitive with *Memini*, *Reminiscor*, *Obliviscor*.—With verbs of *remembering* the use of the Genitive apparently comes from associating the verb with *memor*. Thus *memini* was felt as *memor sum*. *Obliviscor* followed the analogy of its opposite *memini*. Cf. English *differ with* after the analogy of *agree with*. See Babcock, C. L., *A Study in Case-Rivalry, being an Investigation regarding the Use of the Genitive and Accusative with Verbs of Remembering and Forgetting*. (*Cornell Studies in Classical Philology*, Vol. XIV.) New York. Macmillan, 1901.

326. Genitive with *Admoneō*, etc.—Here the verb of *reminding* was probably felt as equivalent to *aliquem memorem reddere*, and was construed with the Genitive on this principle.

327. With Verbs of Judicial Action the Genitive is plausibly explained as resulting from an ellipsis of the governing word, *crimine*, *jūdictiō*, *nōmine*. Thus *Verrem avāritiae coarguit* is to be regarded as standing for *Verrem avāritiae crimine coarguit*; 'he convicts Verres on the charge of avarice.' Occasionally *crimine* was expressed, e.g. Tacitus, *Annals*, vi. 14. 2 *cecidere conjūratiōnis crimine*; iii. 44. 8 *maiestātis crimine reum*.

328. Genitive with *Pudet*, *Paenitet*, etc.—The Genitive here is held to depend upon the noun notion implied in the verb. Thus *pudet* suggests *pudor*; *paenitet*, *paenitentia*; *miseret*, *miseri-cordia*, etc.

329. Interest and *Rēfert*.—The Genitive here is probably the Subjective Genitive used predicatively, i.e. *patris interest rem familiārem cūrāre* is quite analogous to *patris est rem familiārem cūrāre*. For the Ablative Singular Feminine of the Possessive with *rēfert* and *interest*, see § 349. 3.

330. Genitive with Other Verbs.—With verbs of *plenty* and *want*, e.g. *compleō*, *impleō*, *indigeō*, the Genitive, where used, is employed after the analogy of its use with adjectives of *plenty* and *want*; thus *compleō* after *plēnus*; *indigeō* after *egēnus*, etc. But with most verbs of this category the Ablative is the regular construction. *Potior* when construed with the Genitive follows the analogy of *potēns*, 'master of.'

THE ABLATIVE.

331. The Ablative is a so-called syncretistic case, *i.e.* a case resulting from the fusion of more than one original case. The Ablative represents three original Indo-European cases, *viz.* the true Ablative or *from*-case, the Instrumental or *with*-case, and the Locative or *in*-case. Evidences of the fusion referred to are found both in the forms and in the functions of the so-called Ablative.

a) *Forms*: Only a portion of the forms designated as Ablative are historically such. Thus in *ā*-stems the Ablative Singular is a true Ablative (e.g. *portā*, for *portād*; § 118). In the Plural of *ā*-stems the so-called Ablative is probably an Instrumental. The same is true of *ō*-stems as of *ā*-stems. In Consonant stems the Ablative Singular in *-e* (e.g. *mīlite*) is probably a Locative (§ 141), while the Plural forms ending in *-ibus* are true Ablatives. In the *-ī-*, *-ū-*, and *-ē-* stems both the Ablative Singular and the Ablative Plural are true Ablatives.

b) *Functions*: The triple function of the so-called Ablative also points clearly to a triple origin of the case. Thus we find *from*-uses, *with*-uses, and *in*-uses (the last much rarer than the others) side by side. Notions so radically distinct could hardly have developed from a single original case.

By the Romans, of course, the Ablative was felt as a single case. They were totally ignorant of its syncretistic origin, although they recognized its great diversity of function.

332. Causes of Syncretism in the Latin Ablative. — Despite their radical differences of meaning, the Locative, Ablative, and Instrumental cases naturally possessed certain points of contact. Thus *aquā lavāre* might have meant originally either ‘to wash with water’ or ‘to wash in water,’ *i.e.* might be expressed either by the Instrumental or the Locative. Similarly *equō vehī* might mean ‘to be borne on a horse’ or ‘by a horse’; *onus umerō sustinet*, ‘he bears the load on his shoulder’ or ‘with his shoulder’; *carrīs veniunt*, ‘they come with carts’ or ‘on carts,’ *etc.* These examples all show points of contact between the Locative and Instrumental. The Ablative and Instrumental also have certain points of contact. Thus *irā ardēre* might mean either ‘to burn with anger’ or ‘from anger’; *lacte vivunt* might mean either ‘they live from milk’ or ‘by milk,’ *etc.* Points of contact between Locative and Ablative are naturally much less frequent, yet such English expressions as ‘to receive at the hands of’ and ‘from the hands of;’ ‘the wind is in the west’ and ‘the wind is from the west,’ show that even here contact was possible.

Ablative, Instrumental, and Locative, therefore, to a certain extent occupied common ground in the field of thought, and this circumstance ultimately led in Latin to a complete fusion of the three and to the establishment of a single syncretistic case, — the Ablative.

Genuine Ablative Uses.

333. The true Ablative designated *dissociation* or *the point of departure*. When the dissociation is external, we call the construction Ablative of Separation; when the dissociation is internal, we call it Ablative of Source, a construction which in prose is confined to narrow limits. The Ablative of Agency is also a development of the true Ablative, the agent being conceived as the source from which the action emanates; *e.g.* in *ā Caesare accūsātus est* the action was primarily conceived as emanating from Caesar as its source.

334. Ablative of Comparison. — This construction also reveals the original conception of *point of departure*. Thus *melle dulcior* primarily meant 'sweeter, reckoning from honey as the standard,' and so in similar expressions. An examination of Cicero's orations shows that in this writer the Ablative of Comparison is mainly restricted to negative sentences, to interrogative sentences implying a negative, and to a few stock phrases such as *lūce clārius, lātius opīniōne, etc.*

When *plūs, minus, longius*, and *amplius* are used as the equivalents of *plūs quam, minus quam, etc.*, the *plūs, minus, etc.*, were probably originally appositional. Thus *amplius vīgintī urbēs incenduntur* originally meant 'twenty cities, (aye) more were fired.' This explanation, of course, involves the assumption that originally a different order of the words existed in sentences of this type, *e.g. vīgintī urbēs, amplius, incenduntur*, and this assumption is borne out by the repeated occurrence of this order, *e.g. Tac. Ann. xii. 43 quīndecim diērum alimenta, non amplius*, 'food for fifteen days, not more'; Livy xxix. 32. 5 *cum quīnquāgintā, haud amplius, equitibus*, 'with fifty horsemen, no more.' For a detailed discussion of the Ablative of Comparison, see Neville, K. P. R., *The Case-Construction after the Comparative in Latin*. (Cornell Studies in Classical Philology, Vol. XV.) New York, Macmillan, 1901.

Instrumental Uses of the Ablative.

335. The Instrumental was primarily the case of *association* or *with-case*.

336. Ablative of Accompaniment. — This is logically one of the first and most obvious developments of the sociative idea. The construction is not frequent, however, being confined mainly to military expressions. *Gr. 222. 1.*

337. Ablative of Association. — Besides the idea of *accompaniment* (which strictly applies only to persons in connection with a verb of motion) the Ablative also sometimes denotes *association*. This construction was never common in Latin, yet it should be recognized in a limited set of expressions; thus with *jungere, conjugere, miscere, mūtare, permūtare, assuētus*, e.g. *libīdō scelere jūncta*, 'lust joined with crime'; *mella vīnō miscere*, 'to mix honey with wine'; *bellum agricultūrā permūtant*, 'they exchange war for farming'; *assuētus labōre*, 'accustomed to toil' (lit. 'familiarized with toil'). In all of these expressions and in some others of less frequent occurrence, it seems better to recognize the primitive sociative force of the Instrumental, rather than the Ablative of Means, as is done in *Gr.* 218. 5; 7. For a fuller discussion of this Ablative of Association, see Bennett in *Transactions of the American Philological Association*, Vol. XXXVI (1906), pp. 64 ff.

338. Ablative of Attendant Circumstance (Delbrück's 'Instrumentalis der Begleitenden Umstände'; *Vergleichende Syntax*, § 195). — This construction also is a direct outgrowth of the sociative idea inherent in the Instrumental. Thus *dat sonitū magnō strāgem* means 'occasions destruction in connection with a loud crashing'; *nēmō mea fūnera flētū faxit*, 'let no one celebrate my obsequies with weeping'; *exstinguitur ingentī lūctū*, 'he dies under circumstances of great sorrow,' etc.

339. The Ablative of Manner is another obvious development of the sociative idea. Thus in *magnā gravitatē loquitur*, 'he speaks with great impressiveness,' the 'impressiveness' was primarily conceived as an accompanying feature of the speaking. 'Manner' differs from 'Attendant Circumstance' in that it is regularly restricted to *abstract words*, e.g. *celeritatē, virtutē, dignitatē*, etc.

340. Ablative of Accordance.—The construction treated under Ablative of Manner in *Gr.* § 220. 3, viz. *suīs mōribus, meā sententiā, etc.*, seems to be closely connected both with Manner on the one hand and Attendant Circumstance on the other. The type is so definite and pronounced that it deserves clear recognition in our Latin teaching. Another excellent example of the construction is seen in Cic. *de Sen.* 3, *parēs autem vetere prōverbiō cum paribus facillimē congregantur*, ‘according to the old proverb, “birds of a feather flock together.”’

341. Ablative of Means.—The notion of Means is an outgrowth of the idea of Association. Thus, *hostem telō percussit* is primarily ‘he, along with a spear, smote his enemy.’ Out of this sociative idea the notion of *means* or *instrument* developed secondarily. Yet there are few instances of the Ablative of Means in which traces of the sociative notion are not apparent, and in some cases this idea is very prominent, e.g. *deōs precibus adōrāre*, ‘to worship the gods with prayers.’

1. With *ūtor*, *fruor*, *fungor*, *potior*, *vescor*, the Ablative of Means is a natural result of the Middle, i.e. reflexive, use of these verbs, ‘benefit one’s self,’ ‘enjoy one’s self,’ etc.

2. With *opus est* the Ablative is a secondary construction after the analogy of *ūsus est* with the Ablative. In *ūsus est aliquā rē*, ‘there is need of something,’ the Ablative was originally one of Means, lit. ‘there is service by means of something.’ From the notion of *use* the notion of *need* arose secondarily. Cf. German *ich brauche etwas*, ‘I need something,’ as an outgrowth of the earlier meaning, ‘I use something.’ Besides the use of *ūsus est* with the Ablative, we find *ūsus* used predicatively, e.g. *hōc ūsus est*, ‘this is necessary.’ Now in the case of *opus*, the predicate construction was probably the earlier; *opus* is best taken as the Genitive of *ops*, ‘help, service.’ The formation would then be a relic of Genitives of the type of *nōminus, necessus, etc.* (§ 138).

At the outset *hōc opus est* meant 'this is of service,' secondarily 'this is necessary.' Early Latin exhibits many instances of this predicative use of *opus* in its original meaning, 'of service,' and the same force is noticeable at times in Cicero (*e.g. de Or. ii. 296*), Livy (*e.g. xliii. 19. 4*), and later writers. The construction *opus est aliquā rē* seems to be historically later than the predicate construction, and to have developed after the analogy of *ūsus est aliquā rē*. It is in view of this theory of the origin of the construction that it has been classed in the *Gr.* as a subdivision of the Ablative of Means.

3. With *continēri*, *cōsistere*, *cōnstāre*, *consist of, be composed of*, the Ablative was probably originally one of Means. Such is the view of Ebrard, *de Ablativi, Locativi, Instrumentalis usu*, p. 645. Kühner and Roby also give this explanation for the Ablative with *cōnstāre* and *cōsistere*; the use with *continēri* they explain as Locative. But all three words originally had the same meaning, 'hold together, be held together,' and it seems unnecessary to adopt different explanations for the separate verbs. Some scholars regard the Ablative with all three verbs as a true Ablative usage. This view is based upon the occurrence of *ex* with the Ablative with *cōnstare*. But prepositions are a very uncertain guide in such matters. Often more than one case relation is possible with the same verb; and often a verb in its developed meaning takes a different construction from that which it originally had. See Delbrück, *Vergleichende Syntax*, I., p. 230.

4. *Quid hōc homine faciās; quid mē fiet?* Delbrück in his *Ablativus, Localis, Instrumentalis*, p. 17 (published in 1867), explained the case in expressions of this type as a true Ablative. Ebrard's collections for early Latin, however, showed that the construction was rather Instrumental in origin, and Delbrück now (*Vergleichende Syntax*, I., p. 248) adopts this view.

5. **Ablative of the Way by which.**—This construction seems to be one of considerable antiquity, and deserves recognition as

an independent type of the Instrumental. It appears not only in Latin, but in several other Indo-European languages. Illustrations for the Latin are : *ut jugis Octogesam perveniret*, 'that he might reach Octogesa by way of the mountains'; *portis erumpunt*; *frumentum quod flumine Ararī subvexerat*. Cf. German *mit der Bahn reisen*, where the traveller is evidently conceived as keeping company with the road.

342. Ablative of Cause.—Cause is sometimes referred to the true Ablative for its origin. In accordance with this theory *irā ardere* meant originally 'to burn from anger.' The Sanskrit often employs the Ablative in this way. On the other hand an Instrumental origin is equally conceivable. Cf. such English expressions as *burn with anger*, *howl with pain*, *leap with joy*, *green with envy*; the Sanskrit employs the Instrumental as well as the Ablative to denote this relation. Other Indo-European languages also use the Instrumental to denote Cause. While it is impossible to prove that Cause has developed exclusively from the Instrumental conception, yet it is likely that this case has at least had the greater share in propagating the construction; such is now the opinion of Delbrück (*Vergleichende Syntax*, I., § 126). Cf. also Kühner, *Ausführliche Grammatik*, ii. p. 291.

343. Ablative of Degree of Difference.—This seems an outgrowth of the Ablative of Means; *i.e.* *ūnō diē longiorem mensem faciunt* meant primarily 'they make the month longer by means of one day,' and so on.

344. Ablative of Price.—Price was in its origin a development of the Means notion. At the outset, the construction must have been confined to verbs of *buying*, *e.g.* *puellam vīgintī minīs ēmit*, 'he bought the girl by means of twenty minae.' With verbs of *selling* the price was not strictly the means of selling; but

after the analogy of verbs of *buying*, such verbs early came to take the Ablative construction. A still further extension of the construction is seen in its application to verbs of *costing*, *being worth*, *etc.*, and also to the adjectives *vīlis*, 'cheap'; *cārus*, 'dear,' 'too dear,' e.g. *HS sex milibus cōstat*, 'it costs 6000 sesterces'; *asse cārum*, 'dear at a farthing.'

The use of *tantī*, *quantī*, *plūris*, *minōris* with verbs of *buying* and *selling* is the result of a transference of the Genitive of Value (*Gr.* § 203.3) from verbs of *valuing*, *estimating*, *etc.*, to verbs of *buying* and *selling*. Such a transition is psychologically easy. Cf. our English *I wouldn't give a penny for that* (a phrase of *buying*) in the sense of *I don't value that at a penny*.

345. The Ablative of Quality is an obvious outgrowth of the sociative force of the Instrumental case. Thus in a sentence like *serpēns immānī corpore tābitur*, the original idea was 'the serpent glides on with its huge body,' as though the body were a distinct accompaniment of the serpent. But in course of time the Ablative in such cases came to be felt as a modifier of the noun. In this way such expressions as *acerba tuēns immānī corpore serpēns* became possible. Here the phrase *immānī corpore* can be conceived only as an Ablative of Quality, limiting *serpēns*; it cannot be associated with the verb as in the first example.

In conformity with its origin, the Ablative of Quality primarily denotes more or less transitory qualities. Qualities which are the mere outward accompaniment of an action are naturally not permanent. The observation sometimes made that the Genitive denotes *internal* qualities, whereas the Ablative primarily denotes *external* ones, is not sufficiently exact. In the phrase *hortātur ut bonō animō sint*, 'he urges them to be of good courage,' the quality is internal; yet the Genitive could not here be used; for while the quality is internal, it is transitory. On the other hand, 'a man of high purpose' is in Latin *vir magnī animī*, since a per-

manent and not a passing quality is intended. By an extension of usage the Ablative is sometimes employed, where ambiguity would not result, to indicate permanent characteristics; but the Genitive is not used to denote temporary qualities. Physical and bodily characteristics are regularly designated by the Ablative. For an excellent discussion of the Ablative of Quality, see Edwards, Geo. V., *The Ablative of Quality and the Genitive of Quality*. New York, 1900.

346. Ablative of Specification. — This seems to be a development of the sociative force of the Instrumental. Thus *Helvetiī virtūte praecedunt* meant originally 'the Helvetii with their valor are superior'; so *pede claudus*, 'lame with his foot.' The Means conception may also have assisted in the propagation of the construction.

347. Ablative Absolute. — The Ablative Absolute construction is an outgrowth of the sociative force of the Instrumental. Thus in Plaut. *Trin. Prol.* 13, *rem paternam mē adjūtrīce perdidit*, the sense is: 'he lost his property (in connection) with me helping him'; so frequently *mē jūdice*, 'with me as judge'; *tē praesente* 'with you present.' Cf. further *scissā veste*, *passīs capillīs*, 'with clothes torn, and hair dishevelled.' At first the Ablative in such phrases modified the verb of the sentence, but ultimately the original construction was lost sight of, and the phrase as a whole came to be felt as a kind of loose modifier of the rest of the sentence (Ablative Absolute). See Brugmann, *Die lateinischen to-Participia*, *Indogermanische Forschungen*, Vol. V., p. 142 ff.

Others have regarded the Ablative Absolute as a Locative development. This theory was suggested by the fact that the Locative is the case absolute in Sanskrit. That fact, however, would be of little significance for Latin unless it can be shown that the Locative was the case absolute in the Indo-European parent-speech. But there is nothing to show that such was the case.

In fact each language seems to have developed its own case absolute. In Sanskrit we have the Locative, in Greek the Genitive and Accusative; in Gothic there are traces of the Dative; modern German employs the Accusative. As regards Latin, therefore, there is no anterior probability in favor of any particular case. The question is simply one of evidence, and the evidence points to an Instrumental rather than to a Locative origin. Those who advocate a Locative origin would find the beginnings of the construction in the temporal force of the Locative, *e.g.* *Serviō rēgnante*, 'in the time of Servius reigning'; *bellō cōfectō*, 'at the time of the war having been finished,' *etc.* But this explanation seems much less natural than the former.

Another theory, that of Bombe (*De Ablativo Absoluto*, Greifswald, 1877), refers the Ablative Absolute to the true Ablative for its origin. Bombe explains *bellō cōfectō*, *etc.*, as 'after the war having been finished.' But no such use of the true Ablative to denote *time after which* is known for Latin. Moreover, if Bombe's theory were true, we should expect a predominance of time-words in the early history of the construction; but no such predominance is found to exist.

Locative Uses of the Ablative.

348. The Locative seems to have designated originally the space *in* or *within which* something is done. From this meaning the notions *at*, *on* subsequently developed (Delbrück, *Vergleichende Syntax*, I., p. 183). The Locative uses of the Ablative naturally fall into two classes: Place Relations and Time Relations.

349. Place Relations.—These may be either *literal* or *figurative*.

1. In its literal force the Locative may mean:

a) 'in,' as *premit altum corde dolōrem*.

b) 'on,' as *pharetram fert umerō*.

c) 'by,' 'near,' as *litore curvō exstruimus torōs*. This last appears to be rare.

The preposition, however, is usually necessary to express these relations, except in poetry and late prose, and in the classes of words specified in *Gr.* § 228. 1.

Some recognize a Locative use in *tenēre sē castrīs, aliquem tectō recipere, pugnā vincere*; but all of these easily admit interpretation as Instrumental usages, and in the phrase *conquer in battle* it is significant that the Sanskrit regularly employs the Instrumental case.

2. In figurative uses the Locative function of the Ablative is restricted to very narrow limits. Here belong, however, a few phrases such as *animīs pendent*, lit. 'they are in suspense in their minds' (*cf.* the Singular *animī* in *animī pendere*); *stāre prōmissis*, 'to stand by one's promises'; *stāre conventis*; *manēre prōmissis*. In his *Ablativus, Instrumentalis, Localis* (1867), p. 39, Delbrück formerly pronounced in favor of recognizing a Locative usage in connection with *glōrior, dēlector*. But now in his *Vergleichende Syntax*, I., p. 253, this scholar regards the construction as Instrumental in origin. The same explanation is also to be preferred for *laetor, gaudeō, etc.* Similarly with *fīdō* and *cōnfīdō* an Instrumental origin is the more probable, inasmuch as we find this case used in Slavic with verbs of *trusting*.

3. **Rēfert and Interest.**—The Ablative Singular Feminine of the Possessive with *rēfert* originally limited the *rē* (Ablative of *rēs*, 'thing') of *rēfert*. If the construction was Locative in origin, *meā rēfert* may have originally meant 'it bears towards my affair' (Goal Locative; § 351), *i.e.* 'it concerns me.' The use of the Ablative Singular Feminine of the Possessive with *interest* is of secondary origin, being modelled on the construction with *rēfert*, in consequence of similarity of meaning. Some regard *meā rēfert* as equivalent to *ex meā rē fert*; *meā rē* has also been explained as a stereotyped Dative (§§ 86. *b*; 174), and even as a Nominative, *i.e.* for *meā rē (s) fert*, with retention of the original long *a* of the Nominative in *meā*; § 112. 1.

350. Time Relations. — The transference of the Locative from space relations to relations of time is easy and natural. In this way arose the notions of time *at which* and *within which*. The use of the Ablative to denote *duration of time*, which occurs with some little frequency in the best prose of all periods, *e.g.* Caesar, *B. G.* i. 26. 5, *eāque tōtā nocte continenter iērunť*, is probably not a development of the *time within which*, but is rather to be referred to an Instrumental origin. This use of the Instrumental to denote duration of time would correspond to the use of the Instrumental to denote the *way by which* (§ 341. 5).

351. Locative of the Goal. — Sanskrit and Greek both exhibit a goal use of the Locative. This is the result of extending to verbs of *motion* a conception primarily belonging only to verbs of *rest*. Cf. in English *he went among the Indians*, after *he is among the Indians*. Examples in Latin are confined chiefly to the archaic period. Thus, *forō pōnit* (Ennius); *locō collocāre* (Lucilius); *certā parte repōnunt* (Lucretius). Genuine Locative formations, *humī, domī, etc.*, also occur in this sense, *e.g. domī adveniēns*.

Surviving Locative Forms.

352. The chief genuine Locative formations in common use are enumerated in *Gr.* § 232. Beside these we should probably recognize the Locative of an *u*-stem in *noctū*, and (by association with *noctū*) in *diū*. On *diē*, as the Locative of *diēs* in such expressions as *quartī diē, postrīdiē* (for *posterī diē*), see § 256. 1. Plural formations in *-īs* from *ā*- and *ō*-stems are more safely regarded as Instrumentals which have taken on all the functions of the Ablative, Locative included. Plurals in *-ibus* of the Third Declension are certainly Ablative in form. Formations in *-e* of the Third Declension, *e.g. Sulmōne*, are original Locatives; § 141.

THE MOODS.¹

LATIN NAMES OF THE MOODS.

353. 1. The Greek name for mood was ἔγκλισις, literally 'inclination' or 'turn,' *i.e.* 'turn of thought.' The Romans transferred this designation to their own language as *modus*, which is the universal designation for mood among the Latin grammarians. Yet traces of the influence of the Greek designation are still to be seen in the definitions given by the grammarians. Thus Priscian, probably following the tradition, defines *modi* as *diversae inclinationes animi, varios eius affectiones demonstrantes* (Keil, *Grammatici Latini*, Vol. II., p. 421. 17). Diomedes (Keil, *Gram. Lat.* Vol. I., p. 338) gives the heading: *De modis sive inclinationibus verborum*, indicating that *inclinatio* was sometimes used as an alternative designation.

2. The Greeks recognized five ἔγκλίσεις, *viz.* ὀριστική (Indicative), προστακτική (Imperative), εὐκτική (Optative), ὑποτακτική (Subjunctive), ἀπαρέμφατος (Infinitive).

3. Ὀριστική was variously rendered by the Latin grammarians as *modus finitus*, *pronuntiativus*, or *indicativus*. Neither of these designations was precise, however, as ἔγκλισις ὀριστική meant 'mood of definite statement' (from ὀρίζω, 'bound,' 'limit,' 'define,' 'state definitely'). Hence *definitivus* would have been a better name.

4. Ἐγκλισις προστακτική meant mood of command, and was literally translated by the Romans as *modus imperativus*.

5. Ἐγκλισις εὐκτική was the name of the Greek Optative; but the designation was good for only a small portion of the uses of the Greek Optative, *viz.* its employment in wishes. It did not apply with accuracy to the Potential uses of the mood. The

¹On the names of the Moods, see especially Jeep, *Zur Geschichte der Lehre der Redetheile bei den lateinischen Grammatikern*, Leipzig, 1893; pp. 216-236.

Romans, having no special verbal forms recognized as Optative, had no need of the designation *modus optativus*. Yet they sometimes used it, *ad imitationem Graecorum*, as Priscian remarks (Keil, *Gram. Lat.* Vol. II., p. 407). But it should be noted that the Romans never used the name *optativus* to designate a group of inflected forms. With them it designated merely a syntactical use of the Subjunctive, *viz.* the Subjunctive in wishes. They thus made the name narrower than the Greek *ἐνκτική*, whose syntactical province extended beyond what its title designated.

6. Ἐγκλισις ὑποτακτική meant 'mood of subordination' and was the Greek designation for what we ordinarily call the Subjunctive. But the name was a poor one, since it applied only to the uses of the Subjunctive in subordinate clauses, and implied that these represented the original function of the mood. It ignored the independent Volitive uses (Hortatory, Jussive, Deliberative, Prohibitive), also the so-called Anticipatory uses.

The Romans translated ὑποτακτική usually by *subjunctivus*, less frequently by *conjunctivus* (*cf.* Jeep, *Redeteile*, p. 224, footnote 3), names quite as misleading, of course, as the Greek original from which they were taken.

7. Ἀπαρέμφατος was rendered by the Roman grammarians *modus infinitivus* or *infinitus*.

THE SUBJUNCTIVE.

354. 1. Origin of Subjunctive Forms.—The Latin Subjunctive is the result of a fusion of two original moods of the Indo-European parent-speech, the Subjunctive and the Optative. Greek and Sanskrit kept them distinct from each other, but in Latin they early became merged in a single mood endowed with the characteristic meaning of each. The following table indicates the origin of the different formations appearing in the so-called Subjunctive :

SUBJUNCTIVE FORMS.

1. All regular Presents, *e.g. amem, moneam, regam, audiam*; §§ 221 f.
2. All Imperfects, *e.g. essem, amārem, monērem, etc.*; § 222. 3.
3. All Pluperfects, *e.g. amāvissem, dīxisssem, etc.*; § 222. 4.

OPTATIVE FORMS.

1. Presents in *-im*, *e.g. sim, possim, nōlim, mālim, velim, edim, duim*; § 218.
2. All Perfects, *e.g. vīderim, amāverim, etc.*; § 219.

2. **Original Force of the Subjunctive.** — The Indo-European Subjunctive exhibits two meanings which seem to have been the source of all others :

a) The Subjunctive expresses the will of the speaker, *e.g. surgat* = 'I will him to rise,' *i.e.* 'let him rise.' This use implies a certain power or authority on the part of the speaker, *i.e.* he is represented as willing something over which he has control or volition ; hence the name 'Volitive' has been given to characterize this use of the mood.

b) Alongside of this Volitive notion, the Indo-European Subjunctive also possessed a second force, — that of pure futurity (precisely like a Future Indicative). The Greek, particularly of the Homeric dialect, frequently exhibits this Future force of the Subjunctive ; but it is uncertain whether we should recognize it in Latin. In Latin the Subjunctive has a Pure Future force only in subordinate clauses, and this may be traced to a different origin. Yet it should be borne in mind that the so-called Future *erō* was in reality a Present Subjunctive (§ 205. 3) ; also *audiam, regam, etc.* ; while the so-called Future Perfect is an Aorist Subjunctive (§ 216). All of these formations bear witness to a Pure Future force as having once existed in the Latin Subjunctive.

The connection of meaning between the Future force and the Volitive force of the Indo-European Subjunctive is much closer than might at first appear. Thus the English *he's to go* clearly stands on the border line between the two meanings, and may be interpreted either as Volitive, = *let him go*, or as Future, = *he will go*.

It is probably impossible to explain satisfactorily the relationship to each other of these two uses of the Indo-European Subjunctive. Some have regarded the Volitive notion as the original one and the Future notion as derived from that.¹ Others have started with the Pure Future notion as fundamental and have deduced the Volitive uses from this.² Others have regarded the two functions as equally primitive and as representing merely two phases (the Subjective and Objective) of the same thought.³ No attempt to solve this problem, however, has commanded extensive acceptance, nor is it likely to. Fortunately its solution is not necessary to our purpose. The two meanings of the Indo-European Subjunctive may be safely accepted, even though we are unable to determine their mutual relations.

For the views of those who deny that the Indo-European Subjunctive possessed any definite fundamental force (or 'Grundbe-griff'), see below, § 356.

355. Original Force of the Optative.—Here we note two different, but closely related meanings, as in the case of the Subjunctive. Thus:

a) The Optative is used to express an act as wished for by the speaker, e.g. *veniat*, 'may he come!' The element of power, authority, and volition which characterizes the corresponding use of the Indo-European Subjunctive is lacking here.

b) Alongside of the notion of *wishing*, we find both in Greek and in Latin another notion, viz. that of a contingent futurity (Delbrücks *Bedingte Zukunft*), e.g. *aliquis dicat*, 'some one may say'; *crēdiderim*, 'I should believe'; *quis putet*, 'who would think?' This is obviously a weaker type of Future than that belonging to

¹ This is the view of Delbrück in his *Conjunctiv und Optativ im Sanskrit und Griechischen*, p. 11 ff.

² Notably Goodwin in *Greek Moods and Tenses*, p. 371 ff.

³ The view advocated in the earlier edition of this book.

the Subjunctive (in Greek), just as in its meaning of *wishing* the Optative expresses a weaker phase of thought than the Subjunctive.

The problem of the mutual relationship of the different meanings of the Indo-European Optative is even more difficult than for the meanings of the Subjunctive. Delbrück in his *Konjunktiv und Optativ* started with the wish meaning as fundamental, and derived the Potential uses from that. Subsequently (*Altindische Syntax*, p. 302) he has expressed the conviction that the wish meanings and Potential meanings are distinct in their origin.¹ Goodwin (*Greek Moods and Tenses*, p. 384 ff.) starts with the Potential force as original. But scholars are far from agreed as to accepting any of these theories of relationships. It is safer, at present at least, to content ourselves with recognizing the existence of the various Optative functions, even though we cannot determine their origin and mutual relationships.

For the views of those who deny that the Indo-European Optative possessed any precise fundamental force whatever (a 'Grundbegriff'), see the following section.

356. Some eminent syntactical investigators have contested the propriety of attributing to the Indo-European Subjunctive and Optative any precise narrow fundamental value (a 'Grundbegriff'). Thus Abel Bergaigne (*De Conjunctivi et Optativi . . . vi anti-quissima*. Paris, 1877, pp. 41-50; 57-73) urged that the Subjunctive and Optative alike originally covered the entire range of modal conception outside that of positive categorical assertion embraced by the Indicative, and that the specific Subjunctive and Optative uses found in the various Indo-European languages are the result of selection in this wide field. Closely related to this attitude of Bergaigne is that of Morris (*American Journal of*

¹ But in his *Vergleichende Syntax*, IV. 2. p. 373, he apparently returned to his earlier view.

Philology, Vol. XVIII. p. 392 ff. ; also *On Principles and Methods in Syntax*, especially chapters iii. and iv.). Morris recognizes in Subjunctive and Optative no 'Grundbegriff,' but urges that the actual functions of these moods have developed as a result of context, gesture, intonation, *etc.*

Yet to most investigators the phenomena of linguistic growth seem to point to the early existence of a fairly definite value for every inflected form. The existence, also, in Old Indian, Iranian, Greek, Latin, Gothic, and Slavic of a number of substantially the same specific Subjunctive and Optative modal uses seems impossible to account for except upon the basis that the value¹ of these moods in Indo-European was a fairly precise and definite one ; *cf.* Delbrück, *Die Grundlagen der Griechischen Syntax*, p. 116.

357. The so-called Latin Subjunctive, as an amalgamation of the original Indo-European Subjunctive and Optative, might naturally be expected to exhibit all four of the original significations, *viz.* :

Volitive	}	Indo-European Subjunctive.
Pure Future		
Optative	}	Indo-European Optative.
Contingent Future		

As a matter of fact it represents with certainty only three of them, *viz.* the Volitive, Optative, and Contingent Future ; and from these three primary uses are to be derived all existing Subjunctive constructions in Latin, not only in principal, but also in subordinate, clauses.

The absence of the Pure Future use of the Subjunctive in Latin may be accounted for by the fact that the Subjunctive in that use early came to be felt as Indicative, and as a result various Subjunctive formations actually became Indicatives, *erō, audiam*,

¹ It is not necessary that this assumed value was absolutely primitive in Indo-European speech. It may have been the result of development.

vīderō, etc. (§§ 205. 2, 3; 216). This transition to the Indicative of those Subjunctive forms which possessed the Pure Future force naturally resulted in the restriction of the remaining forms to the Volitive use.

CLASSIFICATION OF SUBJUNCTIVE USES.

SUBJUNCTIVE IN PRINCIPAL CLAUSES.

A. Original Uses.

358. Volitive Subjunctive.

a) Jussive, expressing a command. This use is found most commonly :

- 1) In the Third Singular and Third Plural of the Present tense, *e.g.* *loquātur*, 'let him speak'; *loquantur*, 'let them speak.'
- 2) In the Second Singular and Plural Present. The Second Singular often has indefinite force, but not necessarily so. An example is *ūtāre vīribus*, 'use your strength,' *i.e.* 'let a man use his strength' (indefinite).

The Perfect tense is sometimes employed in the Jussive. It calls attention rather to the summary performance of the act, while the Present represents the act as in progress. This is in accord with the origin of the two tenses, for the Perfect was by origin an Aorist (§ 219). *Cf.* under *d*, and § 360, *a*.

Jussives accompanied by *ut*, *utī* occur in early Latin, *e.g.* Plaut. *Capt.* 115, *utī adserventur*, 'just let them be watched!' *Bacch.* 739, *ut caveās*; Ter. *Ad.* 280, *ut omne reddat*; Cato, *de Agr.* 1. 4, *ut bene aedificātum siet*. *Ut* in these and like expressions is an adverb, — probably originally indefinite, corresponding to the indefinite *quī*, 'somehow,' 'only,' 'just.' The three meanings of the adverb *quī* are well substantiated, *viz.* :

1. Relative, 'in which way,' 'as.'

2. Interrogative, 'how?'

3. Indefinite, 'somehow'; *cf. modo*, originally 'in a way,' 'in some way,' 'somehow,' 'only.'

In case of the corresponding adverb *ut* we have :

1. Relative *ut*, 'in which way,' 'as.'

2. Interrogative *ut*, 'how?'

3. If we recognize the Indefinite *ut*, we get for *ut* the third of the three meanings which are assumed for *quī*. The value here suggested for *ut* seems to occur also in *uti-nam*, and to be supported by the use of *quī* and *ut* interchangeably with independent Optatives; see § 359.

b) Of determined resolution. This rare usage is confined to the Present First Singular, *e.g. Terence, Hautontimorumenos* 273 *manē: hōc quod coepī primum enārrem*, 'wait! I'm bound first to finish telling what I began.'

c) Hortatory. This is confined to the Present First Plural, and is a mingling of *a*) and *b*), *e.g. loquāmur*, 'let us speak,' *i.e.* 'I'm bound to speak, and do you speak.'

d) Prohibitive. This occurs in the 2d and 3d Persons Singular and Plural of the Present and Perfect Tenses. The earlier theory as to the Prohibitive was that the Second Singular Perfect was employed of a definite Second Person, while the Second Singular Present had a general (or indefinite) force. This view has been shown to be false by the exhaustive examination of the subject by Elmer, *American Journal of Philology*, 1894, No. 3. In the *Grammar* and the *Appendix* I had given my adhesion to Elmer's view that the Perfect Prohibitive expressed special emotion or excitement. Renewed examination of the question, however, has compelled me to abandon that attitude and to accept the conclusions of Delbrück, who holds that the difference between the Present and Perfect tenses was one of the kind of action designated by the verb, the Present indicating an act (or state) going on, the Perfect an act (or state) conceived of without reference

to continuance. This accords with the origin of the two tenses, for the Perfect was an Aorist (§ 219).

e) Deliberative. This occurs in affirmative questions inquiring after the will or command of the person addressed, e.g. *quid faciam*, in the sense: 'what do you bid me do?' 'what is your will that I do?' Cf. Plaut. *Trin.* 59, *sequere :: quō sequar?* Aul. 651, *redde hūc :: quid reddam?* Capt. 839, *gaude :: quid gaudeam?* The usage, accordingly, consists simply in the inquiry after a command. An English analogy may perhaps be recognized in 'what let's do?' i.e. 'what do you say (direct) that we do?'

The name 'Deliberative' is by no means an accurate designation of the usage here under consideration. There is nothing deliberative in an inquiry after orders. We shall come later, under the head of 'Derived Uses,' to a usage which is truly deliberative. We shall come also to a number of other uses which traditionally bear the name 'Deliberative,' though no deliberative character inheres in them. See § 363.

359. Optative Subjunctive. — The Optative Subjunctive expresses a desire or hope for the fulfillment of a wish. Both the Present and Perfect tenses occur, e.g. Plaut. *Pseud.* 714, *bene sit tibi*; Verg. *Aen.* i. 603, *dī tibi praemia digna ferant*. The Perfect is less frequent than the Present. When used, it ordinarily differs but slightly in value from the Present, denoting the summary performance of an act, as opposed to its continuance (see § 358, a, d), e.g. Cic. *Phil.* xii. 14, *quod dī ōmen āverterint*. But occasionally the Perfect Optative has true Present Perfect force, e.g. Cic. *de Rep.* iv. 8, *cui quidem vērē augurāverim*, lit. 'may I have prophesied,' i.e. 'I hope I have prophesied.'

The Optative Subjunctive is not infrequently accompanied by strengthening particles, e.g. Plaut. *Trin.* 923, *quī istum dī perdant*; Aul. 785, *ut illum dī perdant*. Cf. the use of *ut* with the Jussive (§ 358, a, 2). *Utinam* is also frequent.

360. Subjunctive of Contingent Futurity.— This corresponds to the second of the two meanings of the Indo-European Optative (§ 355. *b*). From this general notion have developed the following special uses :

a) Subjunctive of Pure Possibility, *e.g.* *aliquis dīcat, aliquis dixerit*, ‘some one may say.’ This is the most obvious development of the notion of contingent futurity, but it is rare, being confined chiefly to phrases of the type cited in the above examples. As regards the use of tenses, the Perfect (originally Aorist ; § 219) lays stress upon the accomplishment of the act, while the Present calls attention to its progress. Cf. § 358, *a, d*.

b) Where some condition is implied or expressed, *e.g.* *velim*, ‘I should wish,’ *i.e.* ‘if I were to have my way’; *dīcās*, ‘you would say,’ *i.e.* ‘if you should have occasion to express an opinion.’ This use occurs also particularly in the First Singular of the Perfect (Aorist, § 219), *e.g.* *dixerim*, ‘I should say’; *crēdiderim*, ‘I should believe.’ Where the condition is expressed, we get a Conditional Sentence of the Second Type (*Gr.* § 303), *e.g.* *laetēris, sī veniat*, ‘you would rejoice, if he should come.’

The name Potential is usually given to the Subjunctives cited under *a*) and *b*) ; but this name is somewhat inexact ; see § 365.

B. Derived Uses.

361. The uses here enumerated are secondary developments from those cited above in §§ 358 ff.

362. Extensions of the Jussive and Prohibitive.

a) Corresponding to the Jussive *loquātur* there developed an Imperfect use, *e.g.* *loquerētur*, in the sense, ‘he was to speak,’ *i.e.* ‘he should have spoken.’ This use is manifestly a derived one, since one cannot now will a person to have done in the past what he obviously has failed to do. An expression like *loquerētur*,

therefore, must have been formed after the analogy of *loquātur*. The Pluperfect Subjunctive also occurs in this sense, e.g. *eum imitātus essēs*, 'you ought to have imitated him.' The Volitive character of these expressions is shown by the fact that the negative is regularly *nē*, e.g. Plaut. *Pseud.* 437, *tū nē tāle facerēs*, 'you ought not to have done any such thing'; Cic. *ad Att.* ii. 1, 3, *nē poposcissēs*, 'you ought not to have asked.'

b) The Permissive. An example of this is Cic. *de Sen.* 58, *sibi habeant arma*, 'they may have their weapons;' originally this meant 'let them have!' i.e. 'let them have, for aught I care,' and so, 'they may have.' In this way a recognized permissive value came to attach itself to the Subjunctive. Other examples are Tibullus, i. 1, 58, *tēcum dummodo sim, sēgnis vocer*; Accius, Fr. *ōderint, dum metuant*, 'they may hate, provided they fear.' These Permissive Subjunctives, when negative, imply that one does not need to perform the act involved, e.g. Plaut. *Capt.* 947, *at ob eam rem mihi libellam argentī nē dūis*, 'you don't need to give me,' etc.

c) The Concessive. This is found in the Present, Perfect, and Pluperfect tenses. The Perfect in this use refers to the past. Examples: Cic. *Brut.* 76, *sit Ennius perfectior*, 'I grant that Ennius is more finished'; *Academica*, ii. 75, *at dissolvit idem. Mihi quidem nōn vidētur; sed dissolverit*, 'but I grant that he refuted'; Verg. *Aen.* iv. 603, *fuisse*, 'grant that it had been done'; Cic. *de Sen.* 34, *nē sint vīrēs in senectūte*, 'I grant that there is not strength in old age'; *Or.* 101, *nēmō is, inquit, umquam fuit. Nē fuerit*, 'I grant that there was n't.'

d) Subjunctive of Acquiescence. Here belong expressions like the familiar *fiat* of comedy, 'so be it,' 'very well.'

e) Subjunctive of Supposition. This is infrequent, but is exemplified in such expressions as Cic. *de Off.* iii. 54, *vēndat aedēs vir bonus; pestilentēs sint et habeantur salūbrēs; . . . quaerō . . . num, etc.*, 'let us suppose the case of a good man selling a house; let us

suppose the house is unwholesome, but is considered safe, . . . I ask whether,' *etc.*

363. Extensions of the Deliberative. — These are all outgrowths of the original use mentioned in § 358. *e.* We distinguish :

a) Questions of purely rhetorical character, implying that the thing mentioned is impossible. The Present, Imperfect, and Perfect tenses occur in this use, *e.g. quid faciam!* 'what am I to do?' in the sense: 'there's nothing I can do.' The Imperfect represents this present use projected into the past, *e.g. quid facerem*, 'what was I to do?' implying the impossibility of doing anything. The Perfect is rare, but is found in Plaut. *Amph.* 748, *ubi ego audiverim*, 'where am I to have heard it?' *i.e.* 'how can I have heard it?'

b) Questions implying the idea of duty, obligation, or propriety. The tenses used are the Present and Imperfect. A characteristic example is *quid faciam* in the sense of 'what ought I to do?' 'what should I do?' This is a perfectly natural and legitimate outgrowth of the original idea contained in *quid faciam* (§ 358. *e.*), 'what do you bid me do?' Whenever this question is addressed to a person whose authority is respected, 'what do you bid me do?' becomes tantamount to 'what ought I to do?' So in the Imperfect, *quid facerem* often means 'what was it my duty to do?' This is simply *quid faciam* projected into the past. The negative of this usage is *nōn*,¹ *e.g. nōn haec faciam, nōn haec facerem*, 'is n't it (was n't it) my duty to do these things?' So also in Cic. *pro Arch.* 18, *hunc ego nōn diligam, nōn admīrer?* 'ought I not to love, ought I not to admire this man?' So also in expressions introduced by *cūr*, *quārē*, and rarely *quīn*, *e.g. Caes. B. G. i. 40, cūr dēspērārent*, 'why should they despair?'

¹ The negative *nōn* (instead of *nē*) is to be regarded as a perfectly natural consequence of the derived nature of the usage.

c) Real Deliberative questions. Although the name 'Deliberative' is used as a designation of all the related idioms here considered, yet the only real Deliberative Subjunctive is found in expressions like *quid agam*, *quid faciam*, where the speaker is actually pondering what decision to take or what course of action to pursue.

d) Repudiating Questions, in which the speaker repudiates with scorn some command or imputation, or expresses his disdain at some proposal of another person. The origin of the Repudiating Questions may be seen in passages like Plaut. *Mil. Glo.* 496, *vīcīne auscultā, quaesō :: ego auscultem tibi*. The context shows that the inquiry is uttered with contempt. Hence the idea is, 'I listen to you!' Sometimes we have the Indefinite *ut* (§ 358. a. 2), e.g. Ter. *And.* 618, *tibi ego ut crēdam?* In these cases we see that the usage originated in an inquiry after a command, but that the indignant attitude of the speaker developed a repudiating force. As a result a new category was formed, and we find Repudiating Questions, where no vestige of an inquiry after a command is discernible, or even imaginable, e.g. Plaut. *Capt.* 207, *fingitis fugam :: nōs fugiāmus!* The idiom is even transferred to the past, e.g. Plaut. *Men.* 678, *pallam quam tibi dedī mihi redde :: mihi tu dederis pallam*, 'you gave me a cloak!' Cic. *ad Quint.* i. 3. 1, *ego te vidēre nōluerim*. Pluperfect: Cic. *pro Sulla*, 45, *mihi cūjusquam salūs tantū fuisset, ut meam neglegerem?*

364. Extensions of the Optative. — The use of the Imperfect and Pluperfect Subjunctive in expressions like *utinam tū valērēs*, *utinam adfuissēs*, is also secondary. For if the primary force of the Optative was to denote a wish, it must have looked forward to the future; hence its employment with reference to the present and the past must be a derived usage, after the analogy of *sint felīcēs*, etc.

The Imperfect and Pluperfect Subjunctive, in expressions like

those cited above, do not strictly express a wish, but rather a regret at the present non-existence or the previous non-occurrence of something.

In these derived uses *utinam* is almost invariably used. A very few exceptions occur in poetry.

365. Extensions of the Subjunctive of Contingent Futurity.—

There are three derived uses:

a) The Present 2d Singular in the sense ‘you can, one can,’ *e.g. videās*, ‘you can see.’ In its origin, the Subjunctive of the Contingent Future denoted mere objective possibility, *e.g. dicās* = ‘there’s a possibility, you will say,’ ‘you may say.’ In the derived usage this objective possibility becomes subjective,—‘you may’ becomes ‘you can.’ Strictly speaking, only the second of these is Potential. For potentiality involves capacity and control, which mere possibility does not.

b) The 2d Singular Imperfect. This is restricted to narrow limits, being found chiefly in such expressions as *vidērēs*, ‘one could see’; *cernerēs*, ‘one could observe’; *crēderēs*, ‘one could believe.’ The usage is an extension of *a)* above, and, like that, is Potential in the strict sense of that term.

c) The Imperfect and Pluperfect in the conclusion of contrary-to-fact conditions, *e.g. sī adessēs, vidērēs*; *sī adfuissēs, vīdissēs*. The exact way in which this use has grown up is one of the most difficult problems of Latin syntax. But if, as seems probable, the protasis in such conditional sentences was in origin partly Optative, partly Jussive (*e.g. adessēs*, ‘would that you were here,’ — *vidērēs*, ‘then you would see’), — if this may be assumed, then the use of the Imperfect and Pluperfect would be a kind of assimilation, induced by the regular correspondence of tense and mood in other conditional sentences.

SUBJUNCTIVE IN DEPENDENT CLAUSES.

366. Parataxis and Hypotaxis.—In the earlier stages of language there were no subordinate clauses. Sentences were joined by co-ordination. For example, an independent use of the Indicative was followed by an independent use of the Subjunctive, or by another Indicative without any conjunction, e.g. *eōs moneō, dēsinant*, lit. 'I warn them, let them cease.' In course of time in such combinations the one clause came to be felt as subordinate, and to be introduced by various connecting particles ('subordinate conjunctions'). The stage of co-ordination is called Parataxis; that of subordination, Hypotaxis. In Latin the *paratactic form* of expression often survives, even when the *hypotactic relation* has become clearly developed. This is especially noticeable in the early and colloquial language, but is found also in the best prose in certain categories of expression; see, for example, § 381 f. For further discussion of Parataxis, see Bennett, in *Cornell Studies in Classical Philology*, Vol. IX. p. 66 ff.; Morris, *Principles and Methods in Syntax*, p. 113 ff.

Subjunctive of Purpose.

367. 1. The Subjunctive clause of Purpose is introduced by *ut*, *nē*, *quō*, *quī*, and Relative Adverbs. It was probably Jussive in origin, e.g. *tibi dō pecūniam ut pānem emās* originally meant 'I give you money; just purchase bread.' For this force of *ut*, see § 358. a. 2; 359.

In course of time the *ut*-clause came to be felt as subordinate to the other, and *ut* from being an adverb came to be felt as a subordinate conjunction. In this way arose the purpose clause with *ut*.

2. Negative clauses of purpose introduced by *nē* were quite analogous in origin to those introduced by *ut*. Thus *tibi obstō ne intrēs* probably meant originally 'I stand in your way; don't come in!' Ultimately this Parataxis developed into Hypotaxis.

3. *Quō* as an Ablative of Degree of Difference is regularly confined to use in connection with comparatives. The Subjunctive with *quō* arises in the same way as with other relatives. See 4.

4. *Quī, quae, etc.*, in relative clauses of purpose had practically a demonstrative force, e.g. *tibi librum dō quem legās*, 'I give you a book to read,' originally meant 'I give you a book ; read it !'

5. Relative Clauses with *dignus, indignus, and idōneus* have been classified in Gr. § 282. 3 under Relative Clauses of Purpose. This has been done partly on account of the meaning of such clauses, partly in view of the other constructions found with *dignus, idōneus, etc.* As regards the meaning of the relative clause with *dignus, indignus, idōneus*, it seems impossible to separate a sentence like *dat mihi sūrculōs quōs seram*, 'he gives me shoots to plant,' from *dat mihi sūrculōs dignōs quōs seram*, 'he gives me shoots fit to plant,' originally 'he gives me fit shoots to plant.' So *hominēs dignōs ēlēgit quōs mitteret* may well have meant originally : 'he selected fit men, (in order) to send them,' and then, secondarily, 'he selected men fit to send.' In each case the Subjunctive clause is fairly one of Purpose. This view is further confirmed by the other constructions found with *dignus, idōneus*. Thus we repeatedly find an Infinitive employed with these words, e.g. Verg. *Ecl.* 5. 53, *et puer ipse cantārī dignus*, 'worthy to be praised'; Pliny, *Paneg.* 7. 4, *dignus ēlēgī*, 'worthy to be chosen.' The Gerund with *ad* also occurs, e.g. Cic. *Rep.* i. 18. 30, *dignus ad imitandum*; and sometimes even an *ut*-clause, e.g. *erās dignus ut habērēs* (cited by Quintilian from an early author). The *ut*-clause cannot be regarded as one of Result in this and similar cases, as is done by Kühner, *Ausf. Gr.* ii. p. 858 *d*), since the action is viewed purely as one contemplated, not as one accomplished.

Some regard the relative clause with *dignus, etc.*, as a Clause of Characteristic. It is of course quite true that *dignus*, with a following relative clause, does express a characteristic in a general

way; but the relative clause itself is certainly not a Clause of Characteristic in the technical sense of that term. See § 371.

368. It is obvious that only those purpose clauses are of primitive origin in which the main clause and the subordinate clause refer to different persons. Thus in a sentence of the type *pecūniam mūtuo ut librōs emam, emam* cannot be referred directly to a Volitive origin, since the Volitive Subjunctive is not naturally used to represent a person as exercising his authority and volition over himself. Sentences like the last, therefore, are more probably of later origin and formed upon the analogy of those cited in § 367.

Clauses of Characteristic.

369. The Clause of Characteristic is a relative clause developed from the Subjunctive of Contingent Futurity (§ 360). It is probable that in its origin it was confined to a limited number of words such as *possim, velim, nōlim, mālim, audeam, crēdam, putem, etc.*, following negative expressions. Thus a *nēmō est quī possit*, lit. 'there is no one who would be able,' is so nearly equivalent to 'there is no one who is able,' that it early took on this force. Similarly in such expressions as *nēmō est quī velit, nōlit, mālit, audeat, crēdat, putet*. In all these cases the notion of contingency is so slight as easily to disappear, leaving the relative clause essentially one denoting a fact.

370. Clauses of Characteristic as Distinguished from Relative Clauses of Purpose.—Difficulty is often experienced in distinguishing Clauses of Characteristic from Relative Clauses of Purpose. This difficulty results chiefly from the fact that a Relative Clause of Purpose may denote a characteristic of an antecedent in the general sense of the word *characteristic*. Thus in Cicero, *Brutus, 56 scribēbat orationēs quās alii dicerent*, 'he wrote

speeches for other persons to deliver,' the clause *quās aliī dīcerent* is a Relative Clause of Purpose ; but at the same time it does in a certain sense indicate a 'characteristic' of its antecedent. One essential difference between the Clause of Characteristic and the Relative Clause of Purpose consists in the fact that the former denotes an action or state *contemporary with* or *anterior to* that of the main clause, while the Relative Clause of Purpose denotes an action which is *future* relatively to that of the main clause. In accordance with this principle expressions like *nihil habēō quod agam*, 'I have nothing to do' (Hor. *Sat.* i. 9. 19); *nīl sciō quod gaudeam*, 'I don't know anything to rejoice about' (Plaut. *Capt.* 842) are Relative Clauses of Purpose. Did these sentences mean respectively 'I have nothing that I am doing' and 'I don't know anything that I am rejoicing about' (contemporary action), they would be Clauses of Characteristic.

At times we find sentences which are ambiguous. The syntactical nature of the relative clause will then depend upon the interpretation. A good example is Ter. *Phormio* 433 *habēbis quae tuam senectūtem oblectet*, either 'you will have some one who cheers' (Characteristic) or 'some one to cheer' (Purpose).

371. Clauses of Characteristic Denoting Cause or Opposition.

— In sentences like *ō fortunāte adulēscēns quī tuae virtūtis Homērum praeconem invēneris* there is an apparent violation of the principle that the Clause of Characteristic refers to 'an antecedent not otherwise defined' (*Gr.* § 283. 1); but in such cases as this we may explain the relative as referring to an indefinite antecedent to be supplied. According to this view the original force of the above sentence would have been: 'O! fortunate man, (one) who has found,' *etc.* The frequent employment of *ut quī*, *utpote quī*, *etc.*, 'as being one who,' supports this view. The use of the Second Singular in the subordinate clause would then be a species of attraction.

372. Clauses of Characteristic Introduced by Quīn. — The treatment in *Gr.* § 283. 4 follows that of Brugmann in *Indogermanische Forschungen*, Vol. IV. p. 226 ff. Brugmann sees in the first element of this *quīn* an indeclinable Relative *quī*, which he thinks was capable of standing for any case either Singular or Plural. According to this view, *quīn* might be equivalent to *quī nōn*, *quae nōn*, *quod nōn*, etc.; the *quīn* mentioned in §§ 383, 391 must then be regarded as a separate word.

Clauses of Result.

373. Clauses of Result, introduced by *ut*, *ut nōn*, *quīn*, *quī*, are a development of the Subjunctive of Contingent Future, *viz.* from its second phase, where there is a condition implied (§ 360. *b*). Thus in the sentence *hōc flagitium tāle est ut quīvis ōderit*, the original meaning was: 'this outrage is of such a nature as anyone you please would hate' (*i.e.* if he should see it). From this to the meaning 'of such a nature that anybody you please hates it,' is an easy transition. At the outset it is probable that such Subjunctives as *possit*, *velit*, *nōlit*, *mālit*, *audeat* figured largely in the establishment of this category, since in these verbs the transition from the idea of contingency to that of actuality is particularly easy; *cf.* § 370.

374. Relative Clauses of Result are simply a development of the Clause of Characteristic. At times it is not easy to decide whether the clause is one of Characteristic or of Result, and individual interpretations of the same sentence would doubtless often differ. For example, in the sentence given in *Gr.* § 284. 2 *habētis eum cōsulem quī pārere vestrīs dēcrētīs nōn dubitet*, the clause *quī . . . dubitet* might be felt by some simply as a Clause of Characteristic, — 'a consul of the sort that'; but the clause also admits the interpretation 'a consul such that he does not hesitate'; and in that sense it is a clause of Result.

375. Clauses of Result with Quīn. — These are really Relative Clauses of Result, and differ from Clauses of Characteristic introduced by *quīn* just as ordinary Relative Clauses of Result differ from ordinary Clauses of Characteristic. Wherever the main clause contains *tam*, *tālis*, *etc.*, the Result notion is sufficiently clear.

Causal Clauses.

376. Causal Clauses Introduced by Quod, Quia, Quoniam. — When these take the Subjunctive, it is probably on the principle of Indirect Discourse.

377. Causal Clauses Introduced by Cum. — The Subjunctive with *cum*-causal is a development of the temporal *cum*-clause. The temporal notion easily passes into the causal in all languages. Cf. e.g. in English 'When he saw ruin staring him in the face, he did not care to live,' *i.e.* 'since he saw,' *etc.*

Clauses with Cum-Temporal.

378. The treatment in the *Grammar*, § 228 f., follows the elaborate and convincing exposition of Hale in his *Cum-Constructions*, *Cornell Studies in Classical Philology*, Vol. I. Hale shows that the *cum*-clause is simply a form of the Clause of Characteristic. *Cum*, earlier *quom* (*Gr.* § 9. 1), is a form of the Relative stem *quo-*, and, as such, was quite as capable of introducing a Clause of Characteristic as was any other Relative word. Just as *quī* takes a Clause of Characteristic, stating a quality of a person or thing, so *quom* took a Clause of Characteristic, stating a quality of a time, *i.e.* giving the situation existing at that time. The Indicative *cum*-clause, on the other hand, like the Indicative *quī*-clause, was primarily a defining, or determinative, clause and hence used to denote *a point of time or date*.

Clauses Introduced by *Antequam* and *Priusquam*.

379. Where these are followed by the Subjunctive, Hale (*The Anticipatory Subjunctive in Greek and Latin, Chicago Studies in Classical Philology*, Vol. I., p. 68 ff.) recognizes a survival in Latin of the Indo-European Subjunctive in its Pure Future phase, — a phase conspicuously present in Homeric Greek. Others refer the mood to the Subjunctive of Contingent Futurity (the second of the two uses of the Indo-European Optative; § 360).

Clauses introduced by *Dum*, *Dōnec*, and *Quoad*.

380. These clauses are probably the development of an Optative Parataxis. Thus originally *exspectō: dum veniat*, 'I am waiting; may he come the while.' Hence, 'I am waiting till he comes, for him to come.'

SUBSTANTIVE CLAUSES.

Substantive Clauses Developed from the Volitive.

381. Many of these are often regarded as Substantive Clauses of Purpose. Such a designation implies either that the clauses in question *are* Purpose Clauses or once *were* such; neither of these alternatives represents the truth. With the exception of the clauses mentioned in *Gr.* § 295. 3, all the substantive clauses included in § 295 are the developments of an earlier parataxis (see § 367), in which the Subjunctive was Volitive (Jussive, Deliberative, *etc.*) in nature. For a valuable discussion of the origin of clauses of this kind, see Durham, *Subjunctive Substantive Clauses in Plautus, Cornell Studies in Classical Philology*, Vol. XIII. (Macmillan & Co.).

382. As a typical illustration of the general type here under discussion let us take the sentence, *tibi imperō (ut) hōc mihi dēs*. Whether *ut* is present or absent, is immaterial to our purpose.

In either case the dependent clause is of Jussive origin; *ut* is simply the adverbial particle which we have already met in independent sentences (see §§ 358. *a*; 359). The original difference between *tibi imperō hōc mihi dēs* and *tibi imperō ut hōc mihi dēs*, could hardly have been more than that between 'I command you, give me this,' and 'I command you, just give me this.' Probably even this distinction soon passed away, and the two forms of expression came to be felt as practically equivalent in force.

383. Taking now our *tibi imperō (ut) hōc mihi dēs* as the type, let us consider a variety of Extensions to which it gave rise:

a) 'Extensions within the Present.' After the analogy of *tibi imperō (ut) hōc mihi dēs*, it became natural to form sentences like:

mihi imperat (ut) hōc sibi dem;
tibi imperat (ut) hōc sibi dēs;
illī imperat (ut) hōc sibi det;
illī imperās (ut) hōc tibi det;
mihi imperās (ut) hōc tibi dem.

Our original typical sentence, *tibi imperō (ut) hōc mihi dēs*, was undoubtedly once paratactic: 'I command you; give this to me!' But the developments just enumerated could obviously never have stood in Parataxis; they are analogical 'Extensions within the Present.'

b) 'Future Extensions.' An illustration of these would be, *tibi imperābō (ut) hōc mihi dēs*. A sentence like this could obviously never have stood in Parataxis. It is simply *tibi imperō (ut) hōc mihi dēs* projected into the Future.

c) 'Past Extensions.' An illustration would be, *tibi imperāvī (ut) hōc mihi darēs*. Here similarly we have our *tibi imperō (ut) hōc mihi dēs* projected into the past.

d) 'Negative Extensions.' These are exemplified by *tibi nōn imperō (ut) hōc mihi dēs*. These 'Negative Extensions' may also be combined with Extensions of the kinds already noted, e.g. *tibi nōn imperābō (ut) hōc mihi dēs* (Future); *tibi nōn imperāvī (ut) hōc mihi darēs* (Past); *mihi nōn imperat (ut) hōc sibi dem* (Within the Present).

e) 'Interrogative Extensions.' These are exemplified by *quārē tibi imperō (ut) hōc mihi dēs?* These 'Interrogative Extensions' may at the same time also be Future, Past, Within the Present, or Negative, e.g. *quis tibi imperat (ut) hōc mihi dēs?* *quis tibi imperāvit (ut) hōc mihi darēs?* *cūr mihi nōn imperāvistī (ut) hōc tibi darem?*

f) 'Conditional Extensions,' e.g. *sī tibi imperō (ut) hōc tibi dem*. These may similarly be also Future, Past, Within the Present, or Negative; or they may contain a combination of these Extensions, e.g. *sī mihi nōn imperāvistī (ut) hōc tibi darem*, a Conditional Negative Past Extension.

g) 'Extension by Analogy of the Meaning of the Verb.' Thus *tē ōrō (ut) abeās* undoubtedly represents an original Parataxis: '(Just) go away! I beg you,' 'I beg you to go away.' Now after the analogy of this we get *tē exōrō (ut) abeās*, 'I induce you to go away,' 'I succeed in my request that you go away.' Similarly after *tibi suādeō (ut) abeās*, 'I advise you to go away,' we get *tibi persuādeō (ut) abeās*, 'I succeed in my advice that you go away,' 'I persuade you to go away.' Neither *tē exōrō (ut) abeās* nor *tibi persuādeō (ut) abeās* could have stood in an original Parataxis. Such combinations would have failed to make sense.

A recognition of the foregoing varieties of 'Extensions' is of great importance for an understanding of Substantive Clauses Developed from the Volitive, and in fact for many other varieties of subordinate clauses of Subjunctive origin, e.g. Purpose Clauses, Substantive Clauses Developed from the Optative,

Clauses of Characteristic, Result Clauses, *etc.* No theory of origin can possibly explain all, or even any proportionally large part of the phenomena ordinarily classified under any one of these syntactical usages. A large part of the instances belonging under any single syntactical category (Purpose, Result, Volitive Substantive Clause, *etc.*) represent analogical Extensions of one sort or another.

Classification of Substantive Clauses Developed from the Volitive.

Developed from the Jussive and Prohibitive.

384. With Verbs of *Ordering* or *Commanding*.

Without *ut*.

Original Uses: Plautus, *Poen.* 1155 *dīcō mihi filiam dēspondēās*, 'I bid you to betroth your daughter to me.'

Extensions: Plautus, *Stichus*, 624 *dīxī, in carcerem īrēs*, 'I ordered you to go to prison' (a Past Extension).

With *ut*.

Original Uses: Plautus, *Men.* 990 *dīcō ut imperium meum habeātis cūrae*, 'I bid you heed my orders.'

Extensions: Plautus, *Men.* 784 *ēdīxī tibi ut cavērēs* (Past Extension).

With *nē* and *ut nē*.

Examples: Plautus, *Merc.* 465 *ad portum nē bītās dīcō tibi*, 'I tell you not to go to the harbor'; *Mil. Glo.* 185^a *hōc ēī dīcītō ut nē dīgrediātur*, 'tell her not to depart.'

385. With Verbs of *Begging* and *Requesting*.

Without *ut*.

Original Uses: Plautus, *Merc.* 992^a *pācem faciātis ōrō*, 'I beg you to make peace.'

Extensions: Plautus, *Amph.* 257 *orant ignōscāmus peccātum suum*, 'they entreat us to forgive their fault' (Extension within the Present).

With *ut*.

Original Uses: Plautus, *Curc.* 629 *quaesō ut mihi dicās*, 'I beg you to tell me.'

Extensions: Plautus, *Cas.* 532 *orabat ut properārem*, 'he entreated me to make haste' (Past Extension); *Men.* 1048 *possum exōrāre ut pallam reddat*, 'succeed in my request that she return the cloak,' an Extension after Analogy of Meaning of the Verb; § 383. g. Similarly *impetrō ut*, 'I succeed in my request that.'

With *nē* and *ut nē*.

Original Uses: Plautus, *Bacch.* 1013 *quaesō nē mē dēserās*, 'I beg you not to desert me'; *Rud.* 627 *quaesō ut tē nē pigeat*, 'I beg that you be not loth.'

Extensions: Plautus, *Cist.* 302 *eam exōrēs nē tibi suscēnseat*, 'induce her not to be vexed with you'; *Bacch.* 533 *impetrāvī ut nē quid eī suscēnseat*, 'I succeeded in my request that he cherish no anger toward him.'

Some regard the clause with *exōrō* and *impetrō* as one of Result, but it is abnormal to have *nē* or *ut nē* with a Clause of Result. We have no sure instance of any such Result Clause in the entire Latinity. Furthermore, affirmative clauses dependent on *exōrō* and *impetrō* often lack *ut*, which is never lacking in Result Clauses. It is therefore much simpler and more natural to explain such usages as analogical Extensions.

386. With Verbs of *Advising*.—The origin of the Subjunctive Substantive Clauses after verbs of *advising* is indicated by Plautus, *Men.* 569 *male habeās: sic cēseō*, 'worry him! That's my advice.'

Without *ut*.

Original Uses: Cic. *in Cat.* ii. 9 *eōs hōc moneō, dēsinant furere*, 'I give them this warning: let them cease their frenzy!'

Extensions: Plautus, *Merc.* 1015 *meam sorōrem tibi dem suā dēs*, 'You advise me to give you my sister.'

With *ut*.

Original Use: Plautus, *Trin.* 674 *moneō hōc ut reputēs*, 'I advise you to consider this.'

Extensions: Plaut. *Persa* 842 *hortantur tuō ut imperiō pāream*, 'they exhort me to obey your bidding.'

With *nē*, *ut nē*.

Original Uses: Plautus, *Persa* 680 *nē permittās domum, moneō, tē*, 'I urge you not to hie yourself home.'

Extensions: Plautus, *Stich.* 608 *suādēs nē bitat*, 'you urge him not to go.'

Under this head belong clauses with verbs of *inducing*, *impelling*, *persuading*, e.g. Plautus, *Epid.* 87 *perpulī ut cēnsēret*, 'I induced him to believe'; *Bacch.* 964 *persuāsīt, sē ut amitteret*, 'he persuaded her to let him go'; *Mil. Glo.* 1269 *indūxī in animum nē ōderim*, 'I've persuaded myself not to hate her.' In all these cases the usage represents an 'Extension after the Analogy of the Meaning of the Verb' (§ 383. g). Some regard the Subjunctive Clause after verbs of *inducing*, *persuading*, *impelling*, as a Clause of Result. But the same arguments are to be urged against this view as previously in the discussion of the nature of the clause used with *exōrō* and *impetrō*, viz. the fact that negative clauses with these verbs have *nē*, *ut nē* (instead of *ut nōn*), while in affirmative clauses the *ut* is often lacking. See § 385.

387. With *faciō*, particularly with *fac*, *facite*, *facitō*, 'see to it!'

Without *ut*.

Original Uses: Plautus, *Poen.* 1035 *linguam compescās, face*, 'see that you hold your tongue!' originally 'hold your tongue! see to it!'

Extensions: Plautus, *Men.* 890 *fac sciam*, 'see to it that I know,' 'make me know' (Extension within the Present).

With *ut*.

Original Uses: Plautus, *Persa* 526 *ut accipiat, face*, 'see to it that he receives it!' *Rud.* 1218 *fac ut exōrēs*, 'see that you persuade him!'

Extensions: Plautus, *As.* 28 *faciam ut sciās*, 'I'll see that you know' (Future Extension); *Aul.* 26 *fēcī thēnsaurum ut hic reperīret*, 'I saw to it that he discovered the treasure' (Past Extension).

With *nē*, *ut nē*.

Original Uses: No suitable examples are at hand.

Extensions: Plautus, *Most.* 1145 *fac nē metuam*, 'see to it that I have no occasion for fear!' (Extension within the Present).

Especially interesting are the clauses with *efficiō* and related verbs. Here belong: Virgil, *Ecl.* 3. 51 *efficiam posthāc nē quemquam laccessās*, 'I'll bring it about that you do not challenge anybody hereafter'; Cic. *ad Fam.* i. 2. 4 *hōc vidēmur esse cōnsecūtī ut nē quid cum populō agī possit*, 'we seem to have accomplished this, viz. that no business can be done with the people'; Q. Curtius, iv. 14. 4 *Macedonas assecūtōs nē quis tūtō locus esset*, 'brought it about that no place was safe'; Cic. *pro Milone*, 13. 34 *adeptī estis nē quem cīvem metuerētis*, 'you have achieved your end, of standing in fear of no one.' All of these clauses are probably to be regarded as Extensions after the Analogy

of the Meaning of the Verb (§ 383. g). The origin of the usage probably goes back to clauses with *fac*, *facite*, *faciō*, 'see to it (that)'. From *fac*, the first Extension seems to have been to the other forms of *faciō*; but in our earliest Latin there are many more instances of *fac*, *facite*, *faciō*, followed by Substantive Clauses than of all the other forms of *faciō* combined. From *faciō* the next Extension seems to have been to *efficiō*, 'succeed in one's effort to see to it (that)'; and from *efficiō* the construction was extended to other verbs of closely equivalent meaning, such as *assequor*, *cōsequor*, *adipīscor*.

Many regard the dependent clause with these verbs as one of Result, but the employment of negatives (*nē*, *ut nē*) and the fact that the affirmative clause often lacks *ut*, point to a Volitive origin. Beginning with Cicero we find *ut nōn* in negative clauses after *faciō*, *efficiō*, which seems to show that the Clause of Result also is used with these verbs.

Other verbs of *seeing to it* are *cūrō*, *videō*.

388. With *cavē*, *cavē ne*.

Expressions of the *cavē abeās* Type.

The most plausible theory as to the origin of these expressions is that *cavē abeās* is formed on the analogy of *fac abeās*.

Cavē nē.

Original Uses: Plautus, *Most.* 324 *cavē nē cadās*, 'take care you don't fall!' Originally 'Don't fall! Take care!'

Extensions: Plautus, *Pseud.* 478 *nē quid noceat cāverō*.

389. With Verbs of *Permitting, Granting, Allowing*.

Without *ut*.

Original Uses: Plautus, *Trin.* 1179 *videās licet*, originally 'see! you may'; then, 'You may see'; *Amph.* 806 *sine dīcat*, 'permit him to speak.'

Extensions : Plautus, *Cist.* 454 *sine dicam*, 'let me speak' (Present Extension) ; *Mil. Glo.* 54 *sivī vīverent*, 'I let them live' (Past Extension).

With *ut*.

Original Uses : Plautus, *As.* 43 *dōnō ut expers sis*, 'I permit you to be exempt.'

Extensions : Plautus, *As.* 847 *potestātem dedī ut essēs*, 'I gave you the opportunity to be.' Here we have a noun taking the place of the verb in a Past Extension.

390. With Verbs of *Deciding, Resolving, etc.*

Without *ut*.

Original Uses : An original use would be : *dēcernimus cōsulēs videant*, 'we decree, let the consuls see to it.'

Extensions : The foregoing was evidently the starting-point for expressions like Sall. *Cat.* 29. 2 *senātus dēcrēvit darent operam cōsulēs*, 'the Senate decreed that the consuls should give heed.'

With *ut*.

Original Uses : No suitable examples are at hand.

Extensions : Plautus, *Pseud.* 549 *rūs ut irem cōstitueram*, 'I had resolved to go to the farm' (Past Extension).

391. With *opus est, ūsus est, necesse est, oportet*.

Without *ut*.

Original Uses : Lucretius, iii. 593 *fateāre, necesse est*, 'you must admit' ; originally 'admit ! you must' ; Cic. *de Fin.* ii. 26 *mē ipsum amēs, oportet*, 'you ought to love me myself' ; originally 'love me my myself ! that's your duty.'

Extensions : Plautus, *Poen.* 1244 *mihi patrōnus sim necesse est*, 'I must be my own defender.'

With *ut*.

Original Uses : Plautus, *Truc.* 500 *nunc tibi opust aegram ut tē adsimulēs*, 'now you must pretend that you're ill'; *Mil. Glo.* 1132 *nunc ad mē ut veniat ūsust*.

Several scholars regard the Substantive Clause after *necesse est* as one of Result. But if the clause were one of Result, it would be impossible to account for the practically invariable absence of *ut* in this idiom. Moreover, we find that the clause with *opus est* takes *nē* as a negative in Pliny, *Epp.* vii. 6. 3 *opus esset nē reus viderētur*.

392. With *sequitur*, *reliquum est*, *restat*, in the sense 'it remains to,' 'the next thing is to.'

Without *ut*.

Original Uses : These seem lacking.

Extensions : Cic. *ad Fam.* xv. 21. 6 *reliquum est tuam profectiōnem amōre prōsequar*, 'it remains for me to attend your departure with affectionate wishes.'

These expressions also are followed by Substantive Clauses of Result, but they then have another meaning, *viz.* 'the fact remains that.'

393. Substantive Clauses Introduced by *Quōminus* and *Quin* after Verbs of *hindering*. — As explained in *Gr.* § 295. 3. a, Substantive Clauses introduced by *quōminus* are probably developed from Purpose Clauses. However, they have their ultimate origin in the Volitive, since Purpose is a development from the Volitive (§ 368. 1). The original character of Subjunctive Clauses of this kind may be seen in an expression like *formīdō virōs impedit quōminus velint*, originally : 'fear hinders men, in order that they may not be willing,' *i.e.* prevents them from being willing. *Quōminus* lit. means 'by which the less, by which not,' and hence 'in order that not.'

The origin of Substantive Clauses introduced by *quīn* with expressions of *hindering* is not altogether clear. Two views deserve consideration :

(1) *Quīn* in such clauses may be a relative adverb, compounded of *quī* (old Instrumental), and *ně*, 'not'; lit. 'by which not.' In this sense, *quīn* would be the exact equivalent of *quōminus*, and the Substantive Clause with *quīn* after expressions of *hindering* would have the same origin as that with *quōminus*.

(2) *Quīn* in such clauses may be the interrogative *quīn*, 'why not?' In that case the Substantive Clause is developed from the Deliberative. Cf. Plautus, *Amphitruo*, 560 *quīn loquar, numquam potes dēterrere*; lit. 'why am I not to speak? You cannot prevent it;' i.e. 'You cannot prevent me from speaking;' *Trinummus*, 641 *retinērī nequēō quīn dīcam*.

Clauses introduced by *quīn* after negative expressions of *hindering* are sometimes classified as Result Clauses. It is of course true that in its developed meaning the *quīn*-clause after negative expressions of *hindering* does at times seem to indicate a (negative) result, e.g. *nec impediti sunt quīn facerent* may be conceived as literally meaning 'nor were they prevented so that they didn't do.' But this conception is just as possible in case of *quōminus*-clauses after negative expressions of *hindering*, and even more so in case of *quōminus*-clauses after affirmative expressions of *hindering*. Thus, *tē impediō quōminus haec faciās* might theoretically be conceived as meaning 'I hinder you so that you do not do this.' But *quō minus* is clearly a purpose particle, so that the original purpose character of the *quōminus*-clause seems beyond question. Any consistent treatment of Substantive Clauses must have regard to their origin, not merely to the English rendering. Thus, in a sentence like *eīs persuāsīt ut exīrent*, 'he persuaded them to go out,' the *ut*-clause might seem at first sight to indicate a Result, but an examination of such clauses clearly shows that they are developed from the Jussive.

Clauses introduced by *nē* after verbs of *hindering* are not *necessarily* developed from the Jussive, as suggested in *Gr.* § 295. 3. This is the more probable view; but it is also possible that, like *quōminus* and *quīn*-clauses, they have been developed from Purpose Clauses.

394. Substantive Clauses in Sentences of the Type: *nūlla causa est cūr, nūlla causa est quīn*, etc. (*Gr.* § 295. 7). — These have been explained as developed from the Deliberative. This is the view, among others, of Schmalz (*Lat. Synt.*³ § 350), and is supported by the history of these clauses. Cf. e.g. Cic. *ad Fam.* ii. 17. 1 *quīn dēcēdam nūlla causa est*, originally ‘why shouldn’t I go away! There’s no reason’; later ‘there’s no reason why I shouldn’t go away.’ Cf. Ter. *Andria* 600 *quid causae est, quīn in pīstrīnum proficīscar*, ‘what reason is there why I shouldn’t set out for the mill!’ originally ‘what reason is there? Why shouldn’t I set out?’

Substantive Clauses Developed from the Optative.

395. After Verbs of *wishing* and *desiring* (*Gr.* § 296. 1). — The Optative origin of these Substantive Clauses is sufficiently evident. It should be noted, however, that in colloquial language *volō* sometimes has the force of *commanding* (cf. the English authoritative *I want*, e.g. in *I want you to understand*). In such cases the Substantive Clause with *volō* must be referred to a Volitive origin, e.g. *volō eam dūcās*, ‘I want you to marry her.’

396. After Verbs of *fearing* (*Gr.* § 296. 2). — Instructive for the history of the construction are such early Latin uses as Ter. *Andr.* 277 *Haud verear sī in tē sit sōlō situm: sed ut vim queās ferre*, ‘I should not fear, if it were to depend on you alone; but may you be able to withstand compulsion’; 705 *dīs hīc mī ut satis sit vereor ad agendum*, ‘may this day be sufficient (I’m afraid though).’

Substantive Clauses of Result.

397. Expressions like *accidit ut aegrōtāret*, 'it so happened that he was ill,' show clearly the origin of the Substantive Clause of Result. But the Result notion early became weakened in these clauses, and the substantive notion became so prominent that Substantive Clauses introduced by *ut* occur where not only no notion of Result exists, but where it never could have existed, e.g. *vērīsimile nōn est ut ille antepōneret*, 'it's not likely that he preferred'; *accēdit ut doleam*, 'another fact is that I am suffering'; *praectārum est ut eōs amēmus*, 'it's a noble thing that we love them'; *reliquum est ut virtūs sit frūgālītās*, 'the fact remains that economy is a virtue.'

Substantive Clauses Introduced by Quīn after Nōn Dubitō and Kindred Expressions.

398. In the expressions *nōn dubitō quīn, quis dubitat quīn, nōn est dubium quīn, haud dubium est quīn*, the *quīn*-clause is probably developed from the Deliberative Subjunctive. Thus *quis dubitat quīn in virtūte divitiarū sint* originally meant 'why shouldn't there be riches in virtue! who doubts it?' It seems difficult to find any ground in the history or signification of these clauses for regarding them as Clauses of Result, a view advocated by some.

Indirect Questions.

399. The origin of the Subjunctive in Indirect Questions is not yet clear. The construction is manifestly a relatively late one in the development of Latin syntax. Plautus and Terence frequently employ the Indicative in such sentences.

Conditional Sentences.

400. The treatment in the *Grammar* follows the traditional classification, which has regard exclusively to what is implied in the Protasis in each instance.

401. Conditional sentences are the development of an earlier Parataxis (§ 367). Thus we may assume that the earliest type of *sī valet, bene est*, was *bene est, valet*, 'it is well; he is well.' The conditional force was purely the result of the context, which indicated that *valet* was something assumed. As language developed, the fact that one clause was related to the other as an assumption or condition was brought out more definitely by the use of *sī*; yet conditional sentences without *sī* occur with more or less frequency in all stages of the Latin language (Gr. § 305. 2). They are simply a relic of the earlier paratactic stage. The origin of the conjunctive use of *sī* was as follows: *Sī* was originally an adverb meaning *so*. The most primitive type of a conditional sentence with *sī* would be seen in *bene est sī, valet*, i.e. 'it is well so, (viz. that) he is well.' In this expression *sī* limits *bene est*, and *valet* is really an appositive of the adverbial idea in *sī*. The use of *sī* as a conjunction is secondary and the result of its association. With *sī* cf. English *so* in such expressions as *so you pay me, I shall be satisfied*.

402. Conditional Sentences of the Second Type.—Here the Subjunctive in the Protasis was originally Jussive in character. Thus a sentence like *sī videat, crēdat* would, in its earliest form, have been *videat, crēdat*, lit. 'let him see (i.e. assuming he should see), he would then believe.' The Apodosis is the Subjunctive of Contingent Futurity, conventionally called 'Potential.'

403. Conditional Sentences of the Third Type.—The origin of this type is obscure. Perhaps the Protasis was originally an Optative, i.e. *sī adesset, bene esset*, lit. 'O that he were here! it would be well.'

The employment of *oportuit, decuit, debēbam*, and of the Indicative of the Periphrastic Conjugations in Apodoses of Conditional Sentences of this type is frequently the result of ellipsis. Thus in

sī Pompeius occīsus esset, fuistisne ad arma itūrī, the thought is 'were you about to proceed to arms (and would you have done so ?) had Pompey been slain ?' So in *eum patris locō colere debēbās, sī ūlla in tē pietās esset* the full sense is : 'it was your duty to revere him (and you would now be doing it), had you any sense of devotion.'

Subordinate Adversative Clauses with *Quamvis*.

404. Here the Subjunctive was originally a paratactic Jussive. *Quamvis* was originally *quam vīs*, 'as much as you wish.' Thus in the sentence, *quod turpe est, id, quamvis occultētur, tamen honestum fieri nōn potest*, the original meaning was : 'what is base, let it be concealed as much as you wish, cannot become honorable.' In this way *quamvis* ultimately developed into a Conjunction with the force of 'although.'

Clauses of Proviso with *Dum*, *Modo*, *Dummodo*.

405. These were all originally Jussive. Thus in *manent ingenia senibus, modo permaneat studium et industria*, the original sense was : 'let only interest and vigor remain ! (then) old men's faculties remain.' *Dum* was originally an oblique case of a noun meaning 'while.' Hence in *oderint, dum metuant*, the original sense was 'let them fear the while ! (then) they may hate.' Some regard the clause of Proviso with *dum* as originally temporal ('while'). But that view fails to account for the use of the Subjunctive, and also ignores the fact that the negative with the *dum*-clause of Proviso is always *nē*.

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